

# Global

+GF+

THE GLOBAL MAGAZINE  
FOR GF EMPLOYEES

ISSUE 1-2018

#

Special issue on  
**DIGITALIZATION**

## The rock star

The stage is set for  
Vell Mullens from  
GF Machining Solutions  
in Lincolnshire, USA

### All under control

The master control station  
at GF Automotive's site in  
Altenmarkt, Austria

### One for all

Track & Trace is a  
new digital service from  
GF Piping Systems

### Factory of the future

New opportunities thanks  
to digital solutions from  
GF Machining Solutions

# HELLO!



## Patricia Verbeiren

Sint-Pieters-Leeuw,  
Belgium, January 9,  
2018, 9:00 AM

On this day my colleagues surprised me (2nd from right) with a big balloon on the occasion of my 20 years of service at GF in Belgium.

**Patricia Verbeiren** is Sales Administrator at GF Piping Systems in Sint-Pieters-Leeuw, Belgium.







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



**Gerlie Divina**

Singapore,  
January 9, 2018,  
9:00 AM

At that time I (bottom left) was in the middle of a basic product training by GF Piping Systems. Learning is fun, especially when doing it together with colleagues!

**Gerlie Divina** is Operations Executive at GF Piping Systems in Singapore.



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

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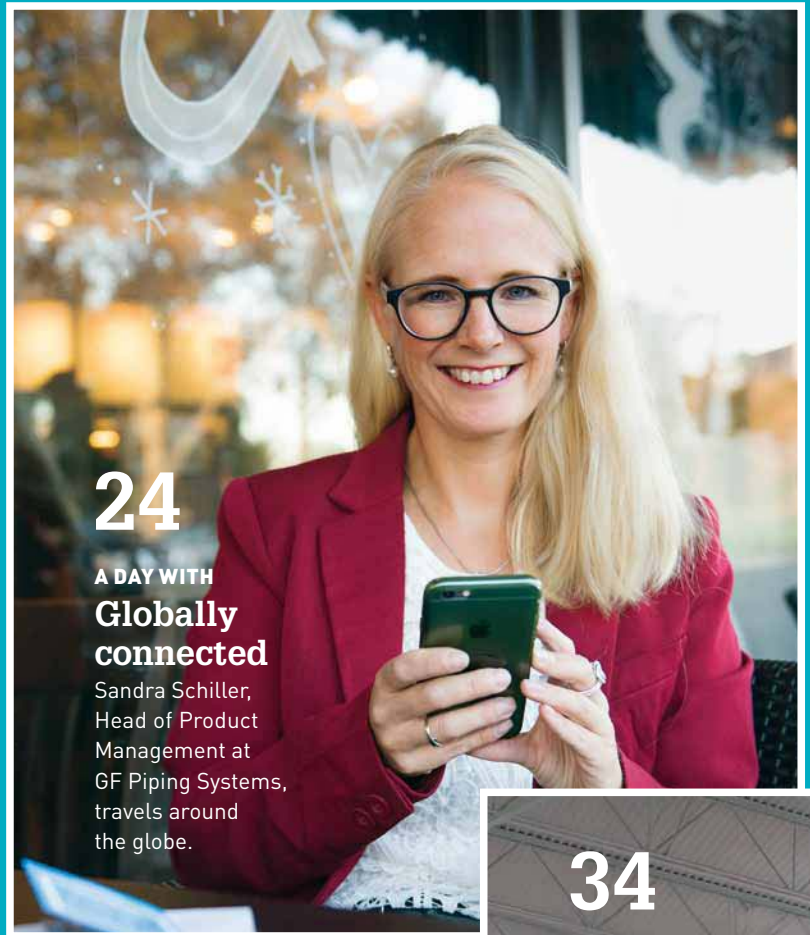
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**EDITORIAL**

**Focus on your questions**

**Dear colleagues,**

When we began planning the 2018 issues of Globe and focused on the theme of digitalization, we soon realized that this topic covers so many different aspects at GF that just a couple of articles would not be enough. Therefore, we decided to dedicate the majority of the first issue of 2018 to this focus topic – knowing that not even this would allow us to cover every single facet of digitalization at GF. It’s clear that digitalization is bringing changes to our company. But today, GF can already look back on over 200 years in which the company has gone through many changes, some of them quite colossal.

Concepts like the Internet of Things, smart factory, and big data occupy our minds; just how much so was evident from the high number of questions to the Top Management we received upon our call for questions on the intranet. Thanks to everyone who contributed! You will find many answers in this Globe issue.

You may see digitalization as a natural evolution or a revolution. Whatever the case, I hope that, once you have read this Globe issue, you can agree that our employees and personal communication, not least with our customers, still come first. And this is despite – or indeed because of – the multitude of digital tools. Please tell us what you think of this topical issue. We appreciate your feedback to [globe@georgfischer.com](mailto:globe@georgfischer.com)!

**P.S.** You will find two brand-new formats in this Globe, which have been developed in response to the findings of the latest reader survey. As always, they revolve around you. “Two points of view” is an opportunity to find out about two GF employees’ opinions on a specific work-related issue, and in “A day with” we accompany employees during one working day.

I hope you have an informative and entertaining read.



**Beat Römer**  
Head of Corporate Communications



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**MY HOME**

**Good balance**

Katsuyuki Tanaka from GF Machining Solutions talks about his home city Tokyo, Japan.




# Digitalization at GF

The age of digitalization not only opens up numerous opportunities but also raises many questions, also among GF employees. In recent weeks the Globe team has received plenty of these questions, some of which form the prelude to this special issue. On the following pages we would like to provide you with first answers and give you an impression of what digitalization means at GF and for GF. Learn more from CEO Yves Serra and the three Heads of the Divisions about the challenges and current projects in the area of digitalization – you will be surprised how digitalized GF already is today.

**Is GF looking for partners in order to drive the digital transformation?**

 **Employee GF Machining Solutions,**  
Losone, Switzerland


**Which role does cyber security play for a global Corporation like GF?**

 **Employee GF Piping Systems,**  
Herzogenburg, Austria

**Which impact does digitalization have on employees of all levels?**

 **Employee GF Machining Solutions,**  
Nidau, Switzerland

**Does GF focus more on new technologies with regard to products or on digital solutions to engage customers?**

 Employee GF Piping Systems, Irvine, USA


**What is GF's understanding of smart factory?**

 Employee GF Machining Solutions, Shanghai, China

**Which impact will digitalization have on GF's business model?**

 Employee GF Piping Systems, New Delhi, India

**How does digitalization influence employees' working hours? Thinking of flexibility, permanent availability, home office, etc.**

 Employee GF Automotive, Werdohl, Germany

**Which specific digitalization projects is GF currently driving forward?**

 Employee GF Machining Solutions, Meyrin, Switzerland

**What does digitalization mean for GF?**

 Employee GF Piping Systems, Schaffhausen, Switzerland



Yves Serra, CEO GF

## “Digitalization is a catalyst to build new business models”

### The digital transformation is in full swing. What role does digitalization play for GF?

Digitalization impacts our product and service offering as well as our internal processes. It is a catalyst to build new business models and to increase the efficiency of our operations.

### What does the digital strategy at GF look like?

Digitalization is not an end in itself. Customer value creation is. The question is more: how can we use digitalization to improve our performance? In this respect, our Corporate-wide Design Thinking initiative does support our digitalization drive, as it focuses on identifying customer needs, quickly prototyping solutions, and adapting them according to customer feedback. We must implement digitalization in ways that speed up our response to customer needs.

### What challenges does GF face?

In recent years, we have launched a number of different activities aimed at driving digital transformation at GF and connecting our production sites, products, and services. To support and coordinate this transformation, we have appointed a Head of Digital Transformation at GF Machining Solutions a year ago. His expertise and experience will benefit not only GF Machining Solutions, but the other two divisions, too. We have also acquired a promising connectivity software company and we now have to make sure its integration goes smoothly.

### How is digitalization affecting the Corporate culture of GF?

GF has been around for over 200 years. We are able to look back on such a long history because the company and its employees, again and again, have successfully adapted to new times and reinvented themselves. One of our strengths is our distinctive culture of teamwork across all boundaries and borders. Maintaining and driving this spirit and adding an agile, customer-oriented mindset to our innovation efforts will go a long way to address the opportunities that digitalization offers. ■



#### Digitalization

In the original sense, digitalization refers to the conversion of analog information into digital formats. Digital transformation describes change processes in business and society triggered by digitalization.



#### Design Thinking

Design Thinking is an innovation method which encourages the rapid development of innovative products and services. The approach puts the customer in the center and involves people from different disciplines.



#### IoT (Internet of Things)

The name is to be taken literally: Every “thing” is assigned a network connection and an IP address. Whether a car, coffee machine, toothbrush, or telephone, everything should be linked and accessible via the internet.



#

**Smart products**

A smart product not only knows when, where, and how it was manufactured, it also communicates information about its usage.

Joost Geginat, Head of GF Piping Systems

## “Our products and services are becoming more intelligent”

### The digital transformation brings a lot of changes to the business world. Which opportunities do you see for your division?

For GF Piping Systems digitalization revolves around two key areas: operational excellence and customer experience. With regard to operational excellence, we will benefit more and more from automated processes and connected smart machines. This will help us to increase availability and speed while reducing manufacturing cost. Customer experience means that we will be able to offer our clients a significant range of new digital products and services, including online platforms and apps. Our goal is to support our customers more effectively in fulfilling their tasks by offering them the right digital solution.

### What kind of challenges is your division facing?

I see a couple of challenges, internally and externally: Internally, we have to deal with a lack of digital skills, especially in the fields of software engineering, hardware development, and IT security. We are also looking for people who can help us ensure a state-of-the-art user experience across our digital products and services. Additionally, we need to improve coordination and harmonization of our digitalization activities. This will avoid fragmented solutions and the reinvention of the wheel. Externally, we are currently investing a lot of time to analyze the real needs of our clients when it comes to digitalization. In such a dynamic and young market environment, we are also facing the lack of existing market standards and the risk of new competitors.

### On which digital projects is your division currently working?

Our products and services are becoming more intelligent. Currently, we are working on a GF Digital Line. As a first step we are piloting “smart valves” for industry applications and a new building automation system for optimal water hygiene. Both projects strive for much easier and faster installations and offer enhanced monitoring and safety features thanks to integrated sensors that collect and evaluate process and product data. Consequently, our customers will be able, for example, to check the health status of a product using their phone or tablet. This will result in higher efficiency and reduced costs. We have also started to implement BIM (Building Information Modeling), the important database for architects and planners, and released eleven important product lines in 2017. In 2018, more product lines will follow.

### How does digitalization influence and shape culture and collaboration in your division?

Digitalization will definitely influence the way we work together. In the future, it will be essential to coordinate data and approaches. This will result in an even closer collaboration across departmental and geographical boundaries. Since digital products have significantly shorter life-cycles, we will accelerate our decision-making and our execution to improve time-to-market. Furthermore, we will need to open up to external partners and new colleagues with different backgrounds. ■



#

**Industry 4.0**

The term that was coined in Germany is based on the fact that industrial production is becoming increasingly intelligent. The aim is a self-organizing production process in which machines, transport systems, products, and people communicate directly with each other.

Josef Edbauer, Head of GF Automotive

## “We need to learn how to think and act in a connected way”

### The digital transformation brings a lot of changes to the business world. Which opportunities do you see for your division?

Digitalization will have a great impact on the way we work. Thanks to new technologies our organization, our processes, and our know-how are drawing closer together. This will lead to more transparency and more synergies. With regard to production, digitalization and automation will not only increase speed and quality but also enable the individualization of our service portfolio right to customer needs.

### What kind of challenges is your division facing?

For me, the biggest challenge is a cultural one. We all need to learn how to think and act in a connected way. Working closely with technologies, machines, and robots will be quite normal in the future. For the senior generation this is a bigger challenge than for the younger one. This implies that we find a constructive way about how the different generations in our division can benefit from each other. In addition, we have to deal with more and more data. As shop floor automation leads to complex flows of information, we have to consider a new production factor: data. Obviously, this requires a new mindset. Furthermore, IT security is a big challenge as cyber-attacks can harm companies in an unprecedented way.

### On which digital projects is your division currently working?

At GF Automotive, three kinds of initiatives are underway. Firstly, we focus on the optimization of our production environment. Following an industry 4.0 approach, we aim to connect our casting machines with driverless systems to supply the lines with material or to remove full product containers. The facility in Mettmann, Germany, is a perfect example of such a fully automated plant. In addition, we want to increase the use of robots to handle physically demanding work and of automatic image processing and recognition to fulfill quality-related tasks. Secondly, we push the digitalization of administrative processes, such as Human Resources-related workflows from recruiting to data management. Thirdly, we will raise awareness for the topic of digitalization across the whole organization and train employees as well as management.

### How does digitalization influence and shape culture and collaboration in your division?

Our established and grown organization needs to learn how to integrate representatives of the young and technology-affine generation. Formerly separate disciplines and teams will have to work more closely. Only if we strive for synergies and harmonized processes, can we create digital solutions which will have an impact on our organization and on our customers. ■



#### AI

The term AI (artificial intelligence) has been around since the 1950s, however it is now emerging as a real industry where self-learning IT systems are used and deployed in self-driving cars, language assistants, and search engines.



#### AR/VR

While augmented reality (AR) relates to the computer-supported enhancement of what we see as the real world, virtual reality (VR) refers to the deceptively real illustration of a purely virtual, interactive environment.

Pascal Boillat, Head of GF Machining Solutions

## “In the future, production processes will be completely digitalized”

### The digital transformation brings a lot of changes to the business world. Which opportunities do you see for your division?

In the future, production processes will be completely digitalized. This shift opens up a lot of possibilities for GF Machining Solutions, especially in the area of services. By connecting all our machines, we will be able to offer innovative and attractive features to our customers. With predictive maintenance, for example, we help them to significantly increase their machine uptime. In addition, we provide advanced and intelligent software solutions to reduce set-up time and much faster diagnostic tools to immediately meet maintenance needs. All this will support the concept of smart manufacturing and lead to maximum efficiency and profitability.

### What kind of challenges is your division facing?

Quite a few: The first challenge concerns the skills of our workforce. If we want to be an integral part of the digital transformation, we need to build up new software competencies within our division. Another challenge is data security. If we want our customers to entrust us with sensitive data and information, we have to ensure a secure link between machines. For this reason, we acquired Symmedia. The German software company is specialized in secure connectivity solutions. Another challenge is data interpretation. Since digitalization provides more and more machine and production data, we will need to find new ways to analyze them.

### On which digital projects is your division currently working?

In order to successfully integrate our machines into the Industry 4.0 landscape, they have to offer full connectivity, that's a prerequisite and an enabler for digitalization. Together with Symmedia, we are working on this topic. Another important project is called "Seamless Connect". With this approach, we aim to realize a very simple and secure way to communicate with our customers' machines in order to optimize maintenance services or software updates.

### How does digitalization influence and shape culture and collaboration in your division?

Our division will undergo considerable change. We have created, for example, a digitalization group within our organization with about ten employees coming from all technologies. This team will accelerate the digital transformation within our division. This is a first important step to make sure our Industry 4.0 efforts are well coordinated. ■



#### Big data

“Data is the new oil” – this comparison is often heard in relation to big data. More specifically, this means that a vast amount of data results from digitalization. This wealth of data is still largely unexploited. Companies that wish to be successful in the future must be able to analyze and use the generated data.



#### Cloud computing

This refers to storage space, software, or server services that are obtained over the internet.



#### Smart factory

In a smart factory, machines, equipment, sensors, and people are all connected with each other. Real production processes are mapped virtually and cyber physical systems largely execute their tasks autonomously. People are supported in their decision making by digital assistants.





# IN BRIEF

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## NEW INTERIOR DESIGN CONCEPT

### Innovative working environment



New office space was opened at GF's headquarters in Schaffhausen, Switzerland, at the end of 2017. The sales companies Switzerland and International of GF Piping Systems are now working in a so-called "Innovation Space," which fosters collaboration with the latest technology and an open room layout. Further office spaces will be designed according to this concept in 2018, including at the GF Piping Systems location in Schaffhausen as well as in the new GF Machining Solutions building in Biel.

## AUGMENTED REALITY

### App brings products to life

GF Automotive delighted visitors at Euroguss in Nuremberg, Germany, in January with a new augmented reality app. The GF cAR app displays a virtual vehicle including the components from GF Automotive in a 3D animation. Information on weight reduction, material, or functional integration can also be displayed with a simple tap.



## EMPLOYEE OPINION SURVEY GF PIPING SYSTEMS



of the participants in the latest employee survey would highly recommend GF Piping Systems as an employer. Over 4'000 employees of the division evaluated aspects such as leadership and commitment, satisfaction, company values as well as Strategy 2020 in September 2017. With a response rate of 82 percent, the first survey to be carried out exclusively online was a major success. Very good results were achieved across all areas, with commitment to objectives as well as to the company scoring the best. According to the survey there is still room for improvement in the area of cross-departmental cooperation. Based on these results, measures are now being worked out on various levels and will be communicated and implemented over the course of this year.



For more pictures and videos on the news in brief, see: [globe.georgfischer.com](http://globe.georgfischer.com)



## E-SOURCING PLATFORM

## Procurement goes digital

A new cloud-based online platform has been making the procurement process easier for all three divisions since last year. Relevant specifications are uploaded to the platform and potential suppliers can submit their offers directly online. Automated analysis of the offers makes it easier to select suppliers and an e-auction can be conducted if need be. The platform was implemented in cross-divisional collaboration because one thing is certain: digitalization generates valuable efficiency advantages in procurement, too.

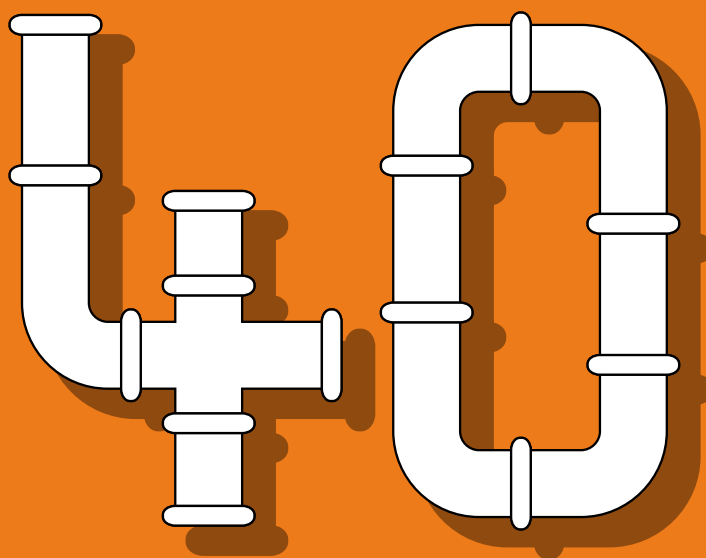
## GLOBAL PRESENCE

## New production center

A new production center of GF Machining Solutions is to be built not far from the current site in Changzhou, China. Construction will start in autumn 2018 and is scheduled to be completed after a building phase of around one year. Thanks to modern technologies, assembly output is expected to double compared to production to date. In addition to an office tract, assembly space, and a production area, the new center will also feature logistics space as well as a training and show room.



## PRODUCT IN FIGURES



million times in 25 years. This is how many times infrared welding machines from GF Piping Systems have joined together synthetic components during this period. Customers around the world trust in this proven technology. Thanks to some digital updates, the new generation of machines, IR-110 A and IR-315 A, will ensure that the next 40 million welded connections are even faster and more efficient for installers and end customers. For example, the new machines can be operated by means of an interactive touchscreen and videos support the processes. Planing, heating, and the joining process are fully automated. Moreover, all key parameters are monitored and recorded during welding in order to achieve an optimal result.

**Start of production of the IR welding machines:** 1992

**Number of IR welding machines sold to date:** 2'500

**New generation:** IR-110 A (2017) and IR-315 A (from 2018)

**Range of application:** d20 to d315 mm

**Areas of application:** all types of ultrapure water applications, e.g. in micro-electronics, the chemical process industry, and energy production

## TWO POINTS OF VIEW

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Digitalization is changing the way we work. New technologies and advancing automation open up new perspectives. But what does that mean in practice? Will robots and algorithms replace the human workforce? What role will face-to-face communication play in the future? Two GF employees describe how they experience the effects of digital transformation in their jobs.

**From my experience, I can tell that digitalization makes communication easier.** From Singapore, I support employees in countries such as Australia, Indonesia, Japan, Korea, Malaysia, and Taiwan. I've always let my colleagues know that I'm just a WhatsApp call, a FaceTime, or a Skype away. With instant messaging, all you need is Wi-Fi or cellular data. Communication is getting faster and cheaper; it encourages us to get in touch more often. Social media channels like LinkedIn enable us to connect with internal and external talents, keeping them up-to-date about the latest GF news and what's happening in different countries. These tools also help us feel that we are part of a global organization.

And digitalization is helping us to improve our global processes, too. Since early 2018, for example, we have a new shared IT platform across all divisions and countries for key strategic HR processes. This will not only raise the quality of data and processes but also foster collaboration. All records and documents are available online now, and managers and employees can access information on performance and development via the web.

This all means that I am online 24/7, in a way. Being connected means that when we schedule a global call with Asia, Europe, and the USA, it can get late. That's the part that we need to be flexible with – the working hours that we have. But these days it's not about having a nine-to-five job anymore; it's about weaving your work schedule around your personal and social life. If I know that I have a call in the evening, I leave the office earlier to go to the gym, and go home after that for the call. This shift in attitude of course needs support from the management, too.

For me, personal communication still has its place. There's never going to be a substitute for this. Face-to-face is how you develop trust and build a good relationship. It's especially important for meetings where you need to seek alignment, for problem solving, or for brainstorming. Digital tools might support an existing relationship but if I can choose, I will always go for face-to-face. ■



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### Arissa Wong

As a Regional HR Manager, Arissa Wong supports the Head Business Unit Asia in Singapore on human resources matters. She has held this position since January 2016.





### Thomas Rohde

As Head of Production and Logistics, Thomas Rohde has accompanied GF on its journey in Mettmann, Germany, since 1998. In the last few years, he has witnessed enormous changes in the way automotive components are manufactured.

**Production at GF Automotive in Mettmann has undergone considerable changes.** In the past, castings were produced in a large number of manual steps: the cores, for example, had to be produced and removed from the core shooting machine, then transported and put in the sand molds. The components were then separated from the casting shell manually on the production line with the help of distraction tools. Today there are fully automated production processes for many of these steps using robots, intelligent systems, and autonomous vehicles.

The advantages of this change are many. First, occupational illnesses and accident frequency have dropped. In conjunction with the implementation of our "Zero risk" safety initiative, the accident rate was reduced by over 40 percent from 2015 to 2016. Thanks to standardization and automation, we consistently produce high-quality components.

And of course, one great advantage is relief from physical strain for our employees, as monotonous, repetitive, and heavy work can now be done by machines and robots.

Digitalization alters the way we work at our site. What was once a traditional foundry has become an attractive workplace, especially to young talents who are interested in smart machines and systems.

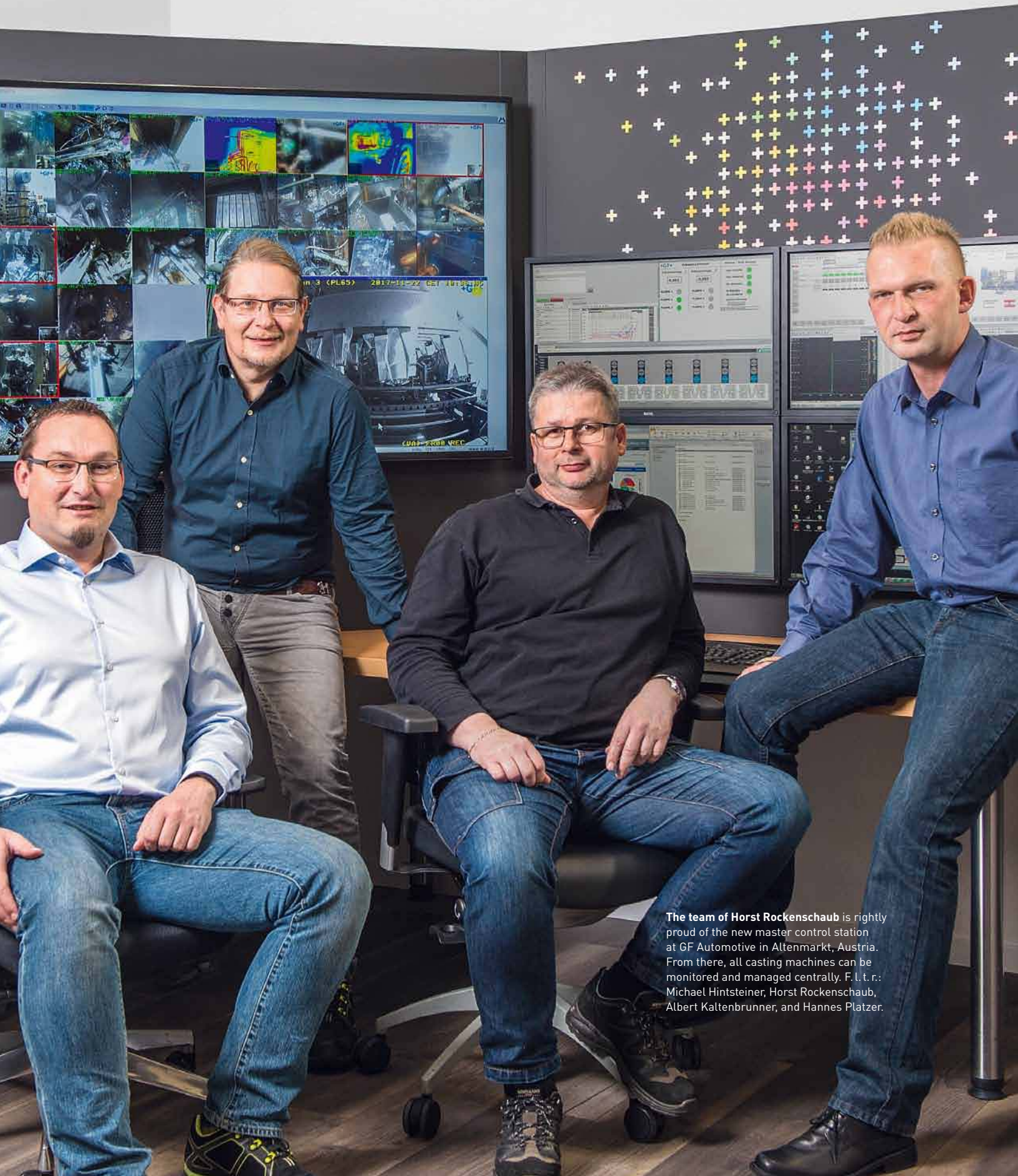
The fact that systems are becoming more and more complex implies new challenges, though. For some it can be very demanding to work with robotic technology. This is why we focus strongly on continuous training for our employees. Additionally, new occupations will arise: for data processing, data analysis, and data evaluation. Robotics and mechatronics – these are the professions of the future for sure.

Yet, even though manufacturing is becoming more and more intelligent, human workforce will always be needed to handle and control the machines. In many process steps – such as testing and assessing the different states of the components – humans have the last word. When it comes to troubleshooting and further developing automated production processes especially, I strongly rely on the expertise of our experienced employees. ■



More pictures of Arissa Wong and Thomas Rohde at [globe.georgfischer.com](http://globe.georgfischer.com)





The team of Horst Rockenschaub is rightly proud of the new master control station at GF Automotive in Altenmarkt, Austria. From there, all casting machines can be monitored and managed centrally. F. l. t. r.: Michael Hintsteiner, Horst Rockenschaub, Albert Kaltenbrunner, and Hannes Platzer.

MADE IT!

**ALTENMARKT MASTER CONTROL STATION**

# Everything under control

**Industry 4.0** is the catchphrase for the increasing digitalization and automation of production processes. The master control station at the light-metal foundry in Altenmarkt, Austria, is a perfect example of how efficiency and quality can be improved by connectivity, sensor technology, and data analysis.

Industrial production is becoming increasingly intelligent and interconnected – and GF Automotive is no exception. A few years ago, Horst Rockenschaub, Head of Process Optimization in Altenmarkt, Austria, came up with the idea of monitoring and managing all casting machines simultaneously from a central point, if needed. His vision has now become reality. The new digital master control station monitors essential parameters such as temperature and pressure in 16 of the 22 casting cells. The control station is also connected to the smelting and tempering furnaces, to the transport systems, as well as to the production lines.

When you enter the master control station, it is clearly a hive of activity. An array of monitors displays the process data for the networked equipment. Massive processing power allows the computers to do everything in real time. Approximately 140 different parameters are recorded, stored centrally, and analyzed for each casting process. “We can immediately spot any process that is about to go wrong. We can take action promptly without interrupting production,” Horst Rockenschaub explains, outlining one of the benefits of an intelligent production network.

**Increased production stability**

Sensor technology plays a central role in this regard. Infrared sensors monitor the exact temperature in the high-pressure die-casting mold, while cameras show real-time images of what is happening inside the casting cells. The master control station uses a predictive maintenance tool to identify and prevent potential incidents

before they occur. This enables a predictive maintenance on the machinery and significantly improves production stability. Employees working at the casting cells also benefit: thanks to the new technologies it is rare that checks have to be carried out close to the molten metal.

**Successful teamwork**

Horst Rockenschaub worked with an experienced team to create the master control station. As an expert on automation and Industry 4.0, Michael Neubauer was responsible for designing the control station. Gerhard Sulzbacher, Head of Plant and Production Planning, was in charge of the new space for the station. Technical connections to the machines and installing the sensors and cameras fell under the remit of Michael Hintsteiner, Head of Electrical Maintenance, while IT specialist Hannes Platzer installed the requisite software. The real challenge for the technical experts was creating interfaces to combine equipment from different manufacturers in a single standardized system. Albert Kaltenbrunner oversees production control within the newly-created control station.

Centralized recording, analysis, and management of production process data is not just a priority at Altenmarkt. The GF Automotive foundries in Herzogenburg, Austria, Werdohl and Singen, Germany, as well as the sites in China and the USA are also moving ahead with digitalization projects. But the team at Altenmarkt is not finished yet: over the next few months, the remaining high-pressure die-casting machinery, production lines, and logistics will be connected to the master control station. ■

**MASTER CONTROL STATION  
FACTS AND FIGURES**

# 12

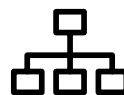
Thanks to twelve high-resolution monitors and the central 65-inch screen the employees at the master control station have everything in sight.



Multiple sensors record information on temperature, pressure, and release agent volumes, then send the data to the master control station.

# 40

Approximately 40 cameras monitor the casting cells and production lines.



Energy management, smelting, and tempering furnaces, driverless transport systems, security systems, and employees are all connected to the master control station.



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



COVER STORY  
**BANDLEADER AND GUITARIST  
VELL MULLENS**

# The rock star

**Vell Mullens** from GF Machining Solutions in Lincolnshire, USA, is the front man of rock band The Moses Gun. Whether in his work or music career, digitalization has left its mark. But the adrenaline rush that comes when performing live on stage is purely analog.

**Name:** Vell Mullens  
**Position:** Inside Sales Representative  
**Division:** GF Machining Solutions  
**Site:** Lincolnshire, USA  
**At GF since:** 2000  
**Remarkable:** Roughly 60'000 YouTube views









Vell Mullens has been performing on stage – and in the studio – with his band The Moses Gun for over 15 years. The music played by the trio from Chicago is best described as rock with a special grunge edge.





new piece a few times. But it's still just the melody. Mullens doesn't really have an idea of what he wants to say when he starts looking for lyrics. Instead, the melody invokes words and phrases, and the lyrics take off from there. "The words have to match up with the melody," he explains. "And when they do, it all just sort of settles into place." After all, it's a purely analog process, based on a given set of chords but always full of creativity and emotion. That approach has won Mullens and The Moses Gun a strong fan base.

#### A fan of EDM

In his job as an Inside Sales Representative at GF Machining Solutions, Vell Mullens sells consumables for electrical discharge machining (EDM) equipment such as wire, filter cartridges, wear parts, and resins. As it turns out, he has become quite a fan of EDM. He is responsible for customers in different regions across North America. "I take care of our existing customers and build up new ones," he says. He makes an effort to come up with fast and creative solutions to the challenges customers are facing. Vell Mullens has plenty of experience to draw on. After all, he has been at GF since 2000 – he started as a Customer Service Representative and soon became an Inside Sales Representative.

Over the years, his job has undergone a number of changes. "I can remember back in the day positioning parts on the fax machine, closing the lid and dialing the customer's number to send images of a specific wear part to make sure we were talking about the same thing," he recalls. Now all it takes is sending a link or PDF via e-mail. Today's digital possibilities mean fewer trips to customers. However, Vell Mullens knows the importance of personal contact, so he tries to see his customers whenever they come to Lincolnshire for training. In addition, he regularly visits the International Manufacturing Technology Show (IMTS) in Chicago, using the opportunity to get in touch with many of his customers who also attend the show. At work Vell Mullens tries to make the most of the mix between the digital and the analog – much like he does when creating and performing his music.

#### Rock goes digital

Although the creative process of songwriting is purely analog, the music industry has embraced digitalization in a big way and in different areas – from connecting with fans, through marketing, all the way up to getting the music out. Today The Moses Gun uses social media to publicize upcoming shows. Not only is it much faster and cheaper, the band also reaches a much larger audience. It is also easier to organize shows using electronic communications. "In an ideal case it only takes an e-mail with a link to an audio file or YouTube video, a follow-up call, and we have a show," explains Vell Mullens. In the age of >

**W**ith an acoustic guitar in his hands, Vell Mullens plays some chords. At this point, he doesn't know where it might all end. It could turn into a song, or it could just be a pleasant way to spend the evening after a long day at work as an Inside Sales Representative at GF Machining Solutions in Lincolnshire, USA. "Sometimes I start off by trying to play a song I've heard. Other times it's just about trying out different combinations. Whatever the case, it always morphs into its own thing," comments Mullens.

Once he has a tune down and he thinks it might have potential, he introduces it to his band, The Moses Gun, where he's the lead singer and guitarist alongside bassist Rich Harris and drummer Jim Kendall. The music of the Chicago-based trio can be best described as rock with a special grunge sound. The idea for the band was born in 1989, and it really got off the ground in 2002. For practice sessions, Mullens swaps his acoustic guitar for an electric one and the band plays the

**«The text has to go with the melody, then the rest comes by itself.»**

**Vell Mullens**  
Inside Sales Representative  
at GF Machining Solutions



#### CHICAGO ROCK TRIO

The name of their band – The Moses Gun – was inspired by American stage and screen actor Moses Gunn, who Vell Mullens and bandmate Rich Harris saw in the films "Rollerball" and "Heartbreak Ridge" back in 1995. They dropped an "n" and added "the," and their band's name was born. After undergoing countless jam sessions and gaining experience playing in other bands, in 2002 The Moses Gun finally got off to a proper start. The band's pieces are heavy with metal and grunge riffs, but maintain a unique thread of melodicism. The most recent album is called "Triage" and was released in July 2017. To date the band has released three albums, with a fourth expected in the first half of 2018.



Even in times of digital communication, personal contact with customers and colleagues is of central importance for Vell Mullens, Inside Sales Representative at GF Machining Solutions.



› digitalization, songs and albums are predominantly sold online, for example via platforms like Bandcamp and iTunes. Fans can also stream The Moses Gun's songs on SoundCloud, Spotify, and more.

**Having a blast on stage**

Despite these new digital opportunities to easily connect with fans, the highlight for Vell Mullens is performing live on stage: he can't get enough of the adrenaline rush that comes along with the applause and cheers from the audience, as well as the audience's direct reaction to the band's music. That's when he knows that their songs have an impact on people. "On stage we're having a blast, and I can see it on the faces of our fans that they are too," says Vell Mullens.

Even though he loves to rock on stage, neither Vell Mullens nor his bandmates are the kind of rock stars who are up all night and sleep all day. That's why they carefully select their gigs and prefer weekend engagements. Of the two or three shows they do a month, one of them could be an out-of-town performance. During the week they usually meet up twice, either for rehearsals or to work on recordings. That keeps Vell Mullens close to home, which is where he wants to be, with his four kids aged between three and 19. In fact, his 19-year-old son, who is now studying music, seems to have inherited the musical genes from dad. ■

**VELL MULLENS' FAVORITE PLAYLIST**

- Nirvana:** Nevermind
- Metallica:** Master of Puppets
- Led Zeppelin:** Led Zeppelin IV
- Faith No More:** Angel Dust
- Godflesh:** Streetcleaner
- Stone Temple Pilots:** Tiny Music ...
- Songs from the Vatican Gift Shop
- Prince and the Revolution:**
- Purple Rain



More pictures and a song for all GF employees by The Moses Gun at [globe.georgfischer.com](http://globe.georgfischer.com)

# 3x3

1. This is the number of digital messages I've sent today:
2. The best digital helpers for my daily life?
3. Face-to-face communication at work is important because ...



**Marloes Kamp**  
Marketing Officer,  
GF Piping Systems,  
Epe, Netherlands



1. 18 digital messages.

## 2. WHATSAPP!

3. ... without face-to-face communication I wouldn't be able to do my job properly.



**Tom Kahl**  
4DX/Symbios Manager,  
GF Automotive,  
Leipzig, Germany

1. AROUND 10-30 PER DAY.

2. My smartphone – I don't know what I used to do without it any more.



3. ... no smartphone or PC can produce a similar feeling of appreciation.



**Stephanie Tan**  
Service Coordinator,  
GF Machining Solutions,  
Singapore

1. 20 via mobile and 33 via e-mail.



2. My robot vacuum cleaner so I have a clean floor every day when I get home.

3. ... IT HELPS TO BETTER UNDERSTAND THOUGHTS AND FEELINGS AND TO BUILD RELATIONSHIPS.

**JOIN IN AND WIN!**

**And here are the new questions:**

1. My favorite morning routine?
2. This always makes me laugh:
3. The best thing about my workplace is ...

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)





**Name:** Sandra Schiller  
**Position:** Head of Product Management Valves and Automation  
**Division:** GF Piping Systems  
**Site:** Schaffhausen, Switzerland  
**At GF since:** 2005

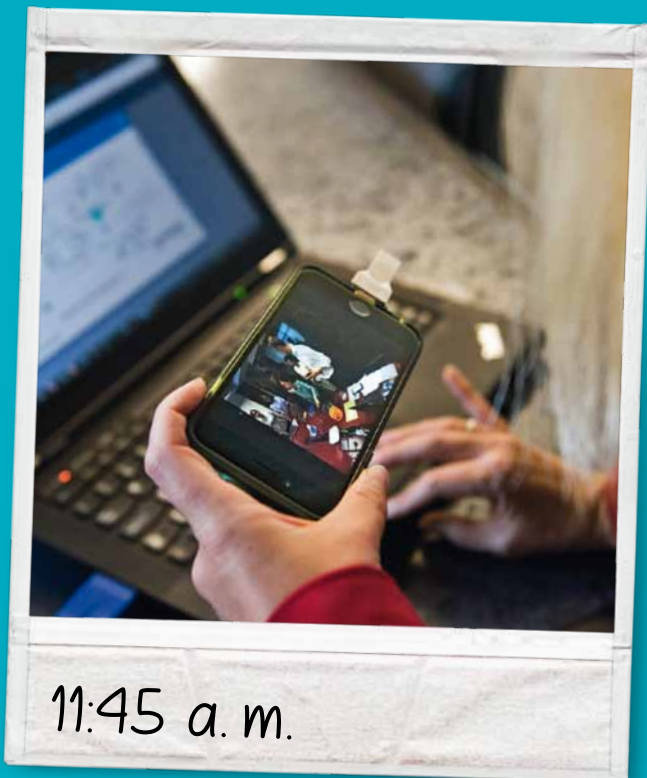


**Good morning!** For Sandra Schiller, today begins in a hotel in El Monte, USA. She sets off early in the morning to meet her colleagues at GF Signet.

A DAY WITH  
**SANDRA SCHILLER**

## Globally connected

**Sandra Schiller** heads Product Management Valves and Automation and is part of the Design Thinking core team at GF Piping Systems. She is currently driving forward the development of a new digital product portfolio.

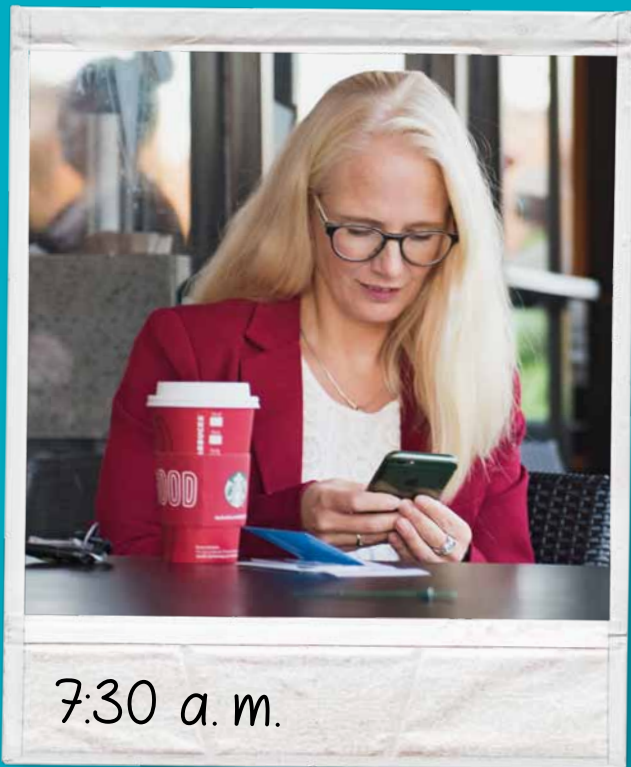


**Just before lunch** she receives another message from China. There are problems with the presentation of the prototype. Luckily, the new valve can be controlled via the internet, too. This means that Sandra Schiller can help out with just one mouse click, even though she is 13'000 km away.



**In the afternoon**, she and her US colleagues go through the key findings of the Design Thinking interviews held so far. Together they define the next steps for the development of the new product portfolio. One thing is sure: they'll be working closely together in future as well.





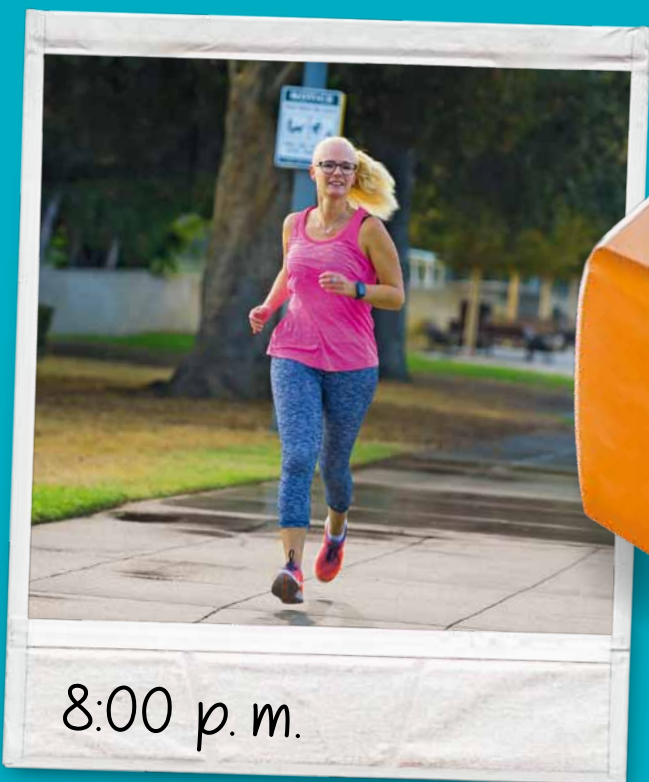
7:30 a. m.

**While grabbing a coffee en route**, she receives a message from her Design Thinking colleague: "The prototype and I have arrived safely in China." Great news, as he will be presenting the prototype of the new product to customers and gathering important feedback from them today.



10:30 a. m.

**Sandra Schiller in her element:** Once she has arrived at GF Signet, she presents the latest products and ideas from Valves and Automation to her Product Management colleagues. They are particularly interested in the outlook she gives on digitalization and Design Thinking.



8:00 p. m.

**After dinner** with her colleagues Sandra Schiller finishes off her day with some exercise. She enjoys the fresh air and physical balance and is already looking forward to the next day full of new ideas and experiences.

**Intelligent valve:** This prototype is part of the new digital product line of GF Piping Systems.



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

THAT'S HOW IT WORKS!  
**TRACK & TRACE**

# One for all

Track & Trace is a new digital service from GF Piping Systems that helps customers to better plan, manage, and implement their piping installations.



### Planning & Preparation

Before starting a project, the utility company can set up and plan the project directly on the Track & Trace customer web portal. The planner can define different tasks and link them to contractors and even specific installers. In addition, he or she can set up jobsite metrics, such as the number of joints to be installed. Tasks, metrics, and specifications can be easily accessed by all parties involved.



### Installing & Monitoring

The app on the handheld device guides the installer on site through a defined installation and data collection process including scanning QR codes on the GF products. Thanks to the connection with the Track & Trace web portal, photos, geo location, comments, and welding data are synchronized and stored automatically. As the portal can be accessed remotely, there is no need to travel to the jobsite to monitor the progress. In the event of any problems, Track & Trace aids with troubleshooting.







### Post-Managing & Analyzing

Since all data is archived on a central cloud, at the end of a project the utility company has a complete overview of all tasks and results of the project. Reports can easily be created and statistics help analyze the overall performance – thereby also providing a valuable basis for planning future projects.

**E**fficient workflow processes and high-quality installations – that's what GF Piping Systems' customers want when managing their piping installations. The new digital service, Track & Trace, helps to achieve just that. "Track & Trace was developed with the customer in mind," says Riccardo Barbone from the Services Development Group at GF Piping Systems. Over the course of several months, Riccardo and local sales colleagues visited construction sites to gain an understanding of how things are done and what could be improved. They also examined the needs of all the stakeholders involved in the process, from utility companies and grid owners to planners and installers.

It soon became apparent that a smart collaborative tool which connects everyone across the entire jobsite workflow could make a huge impact. So the GF service team went to work to create a solution. When the test versions of Track & Trace were presented to customers, Riccardo says, a typical response was: "When can we have this?" At the beginning of 2017, Generation 1 of the service was ready for the market.

### Everybody is connected

Track & Trace modernizes the way jobsite piping system installations are planned, managed, and executed. The heart of this digital service is a secure external cloud where all relevant data is automatically stored. Apart from that, there are two main elements: a customer web portal for keeping track of projects and an app on a mobile device for collecting product and installation data. In addition, an optional navigation satellite system is available to enable centimeter-precise positioning of the products.

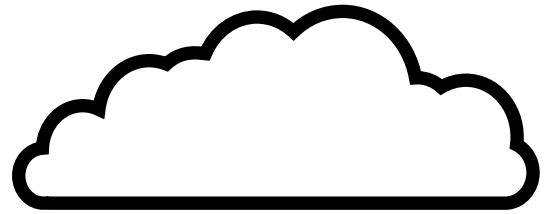
All users have access to a common data set and different modules that simplify their jobs. While an installer, for example, uses the app to collect work and welding data on site, the planner of a utility company uses the web portal to monitor the installation process right from his or her office desk. Thanks to fast synchronization, the status of the project is visible in real time and jobsite work can be instantly evaluated. Since all parties are connected via one tool, communication in both directions and giving feedback are easy.

### Many benefits

The benefits of Track & Trace are numerous. Thanks to full remote access to jobsite data, customers have a complete and up-to-date overview of past, present, and future tasks. This not only eliminates paperwork but also speeds up workflows and helps ensure high-quality installations. Another important aspect is the automatic archiving function that enables easy, secure, and reliable data management.

As with all digital solutions, Track & Trace is being continuously improved. Generation 2 will be launched in early 2018. "Customers will then be able to install the app on any iOS or Android device," explains Riccardo Barbone. It will also be possible to integrate products from other suppliers in the near future. In addition, data security is being stepped up with an even more secure cloud. ■

OUR MARKETS  
**INDUSTRY 4.0**



# Shaping digital transformation

**The digitalization of industry is in full swing.** This is opening up attractive opportunities for GF Machining Solutions as a manufacturer of machines and systems for a large number of producing companies. With smart solutions the division offers its customers real added value.

Imagine a world in which all conceivable devices are connected and generate data: not only PCs and smartphones, but also consumer electronics and household appliances, medical equipment, or even your car. This is what the vision of the Internet of Things (IoT) looks like. This vision is not only changing consumer markets at the moment, but also business-to-business segments (B2B), in which GF operates. In addition, fast internet, new network technologies, cheap and flexible cloud solutions as well as more powerful software are driving this trend.

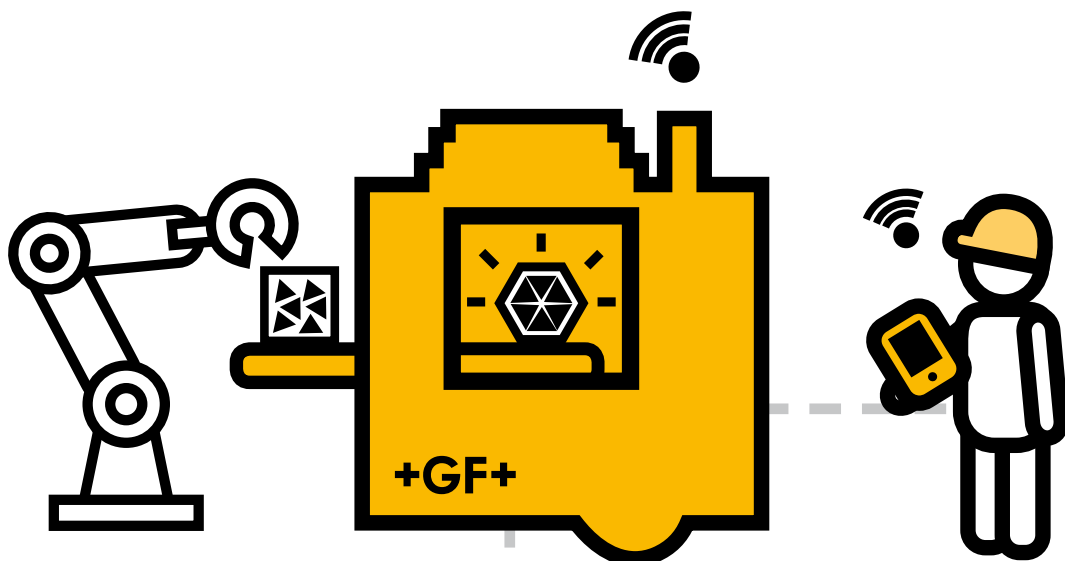
## Self-organizing production

As a result of the Internet of Things, industrial production is becoming more and more connected and intelligent. The term Industry 4.0, which originated in Germany, gets to the heart of this trend: machines, plants, and transport systems equipped with sensors exchange data with one another, learn from each other, and communicate directly

with humans. Alongside machine-to-machine communication (M2M), the hallmarks of self-organizing production include digitalized processes and services as well as a high degree of automation. The overall aim of Industry 4.0 is significantly higher productivity thanks to shorter production times, optimum capacity utilization, and improved quality. This has heralded the transition from mass production to mass customization.

## Smart solutions and products

For GF Machining Solutions as a manufacturer of machines and systems for the tool- and mold-making industry and for producers of precision components, the digital transformation plays a crucial role. The topic has top priority for the division's customers in the aerospace, information and communication technology, medical, and automotive industries. This opens up many opportunities for GF Machining Solutions. First of all, by developing and manufacturing connected machines (smart machines),



which provide not only the precision and speed valued by the market, but also secure and technologically advanced networking technologies. In this regard the acquisition of Symmedia plays a central part (see interview on the right). Secondly, by positioning itself as an expert in the area of industrial automation (shop floor automation), which offers machines, robots, measuring systems, e. g. GF Machining Solutions has been very well established in this market for years with its Swedish company System 3R. Thirdly, by supporting intelligent, connected production (smart factories) with digital solutions. And finally, by pointing its customers in new directions in the areas of maintenance, service, and support (smart companies). The successful development of the rConnect platform is one example of this. Thanks to this platform, machines will be able to independently carry out status diagnosis, request spare parts, or inform GF's customer service in the future. ■



#### Andreas Rauch

As Head of Digital Transformation at GF Machining Solutions, Andreas Rauch makes the division ready for the digital future. Together with his team he is working with colleagues from R&D, service, and sales departments on new products and services. It is particularly important to him that digitalization is focused on employees and customers. As such, he values and seeks personal contact every single

day. Andreas Rauch has been at GF since April 2017.

## “We have extensive expertise in the field of digitalization”

### At the beginning of September 2017

GF Machining Solutions acquired Symmedia, a software specialist for machine connectivity solutions. In an interview with Globe, Peter Barkowsky, Co-founder and Managing Director, reveals what makes the company's software so special and which customers are benefiting from it.



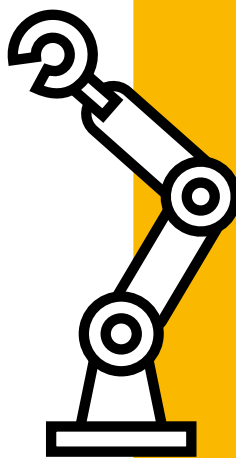
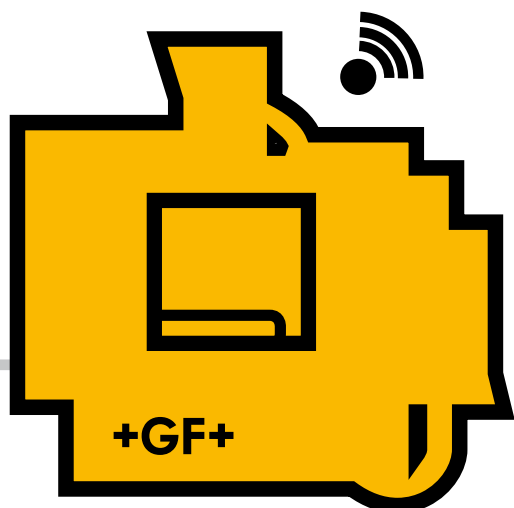
Peter Barkowsky, Co-founder and Managing Director Symmedia.

#### Mr Barkowsky, what's special about your software?

Our software goes by the name symmedia SP/1. It is the result of our extensive expertise in digitalization and software solutions combined with our knowledge of mechanical engineering. Plus, because we have worked on more than 500 projects, we know how factories are laid out, how people work in factories, and what their needs are. The latter in particular is the reason machine manufacturers like working with us.

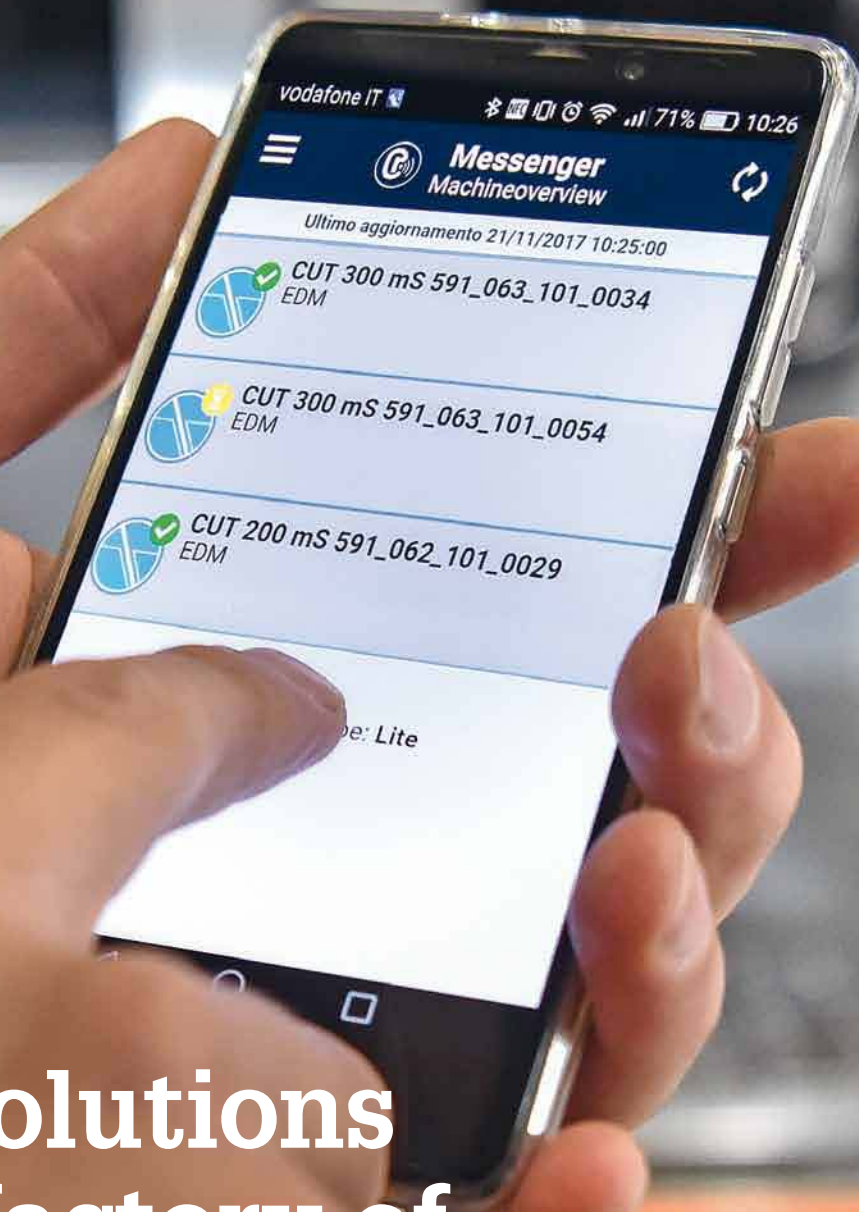


Read the entire interview on Globe Online at [globe.georgfischer.com](http://globe.georgfischer.com)





OUR CUSTOMERS  
**ALDEGHI, BERGAMASCO, ITALY**



# Smart solutions for the factory of the future

**The Industrial Internet of Things (IIoT)** is opening up a new era of smart manufacturing. Accordingly, GF Machining Solutions has been speeding up its digital transformation and broadening its digital portfolio. A prime example is the software solution rConnect, which helps Italian mold and tool maker Aldeghi ensure maximum machine uptime.

**C**ommonly described as Industry 4.0, a revolution is in progress that will change shop floors all over the world: smart machines will be connected with one another and soon make smart factories a reality. GF Machining Solutions is part of this radical change. "We have a clear vision of industrial processes in the future and a strategy to realize the potential for our customers," says Andreas Rauch, Head of Digital Transformation at GF Machining Solutions.

However, the factory of the future won't be built overnight. On the contrary, it will require many small steps. A starting point is automation and the ability to flexibly coordinate machining processes with one another. "This is something we already do very well," Andreas Rauch says. Another important aspect is connectivity: enabling machines to communicate with one another, to deliver data wirelessly, and to be accessed from remote service centers. With the digital service platform rConnect, GF Machining Solutions already provides such an offering. rConnect was developed in collaboration with German software specialist Symmedia, a company that GF Machining Solutions acquired in September 2017.

#### Digital services for higher productivity

rConnect is a platform for digital services available for all technologies supplied by GF Machining Solutions, from Milling, EDM, and Laser to Automation and Additive Manufacturing. Following a modular approach, rConnect comprises different services which empower manufacturers to increase their productivity. First, there is the Customer Cockpit, which serves as the user interface and the door to GF Machining Solutions' world of digital services. It connects customers with their production facilities via PC or mobile device from anywhere at any time. Live Remote Assistance (LRA) provides direct access to GF experts, allowing face-to-face assistance using audio, video, chat, and many more functionalities. In order to resolve a problem with a machine, the GF experts can now use LRA to perform checks remotely. This way, machine downtime can be reduced significantly, as less time is needed to diagnose problems and service engineers do not need to travel to customers for each incident.

**Cesare Aldeghi (r.),**  
Managing Director  
of Aldeghi, and  
Enrico Borghi, Customer  
Service employee at  
GF Machining Solutions,  
work closely together  
on the production of molds  
and tools.

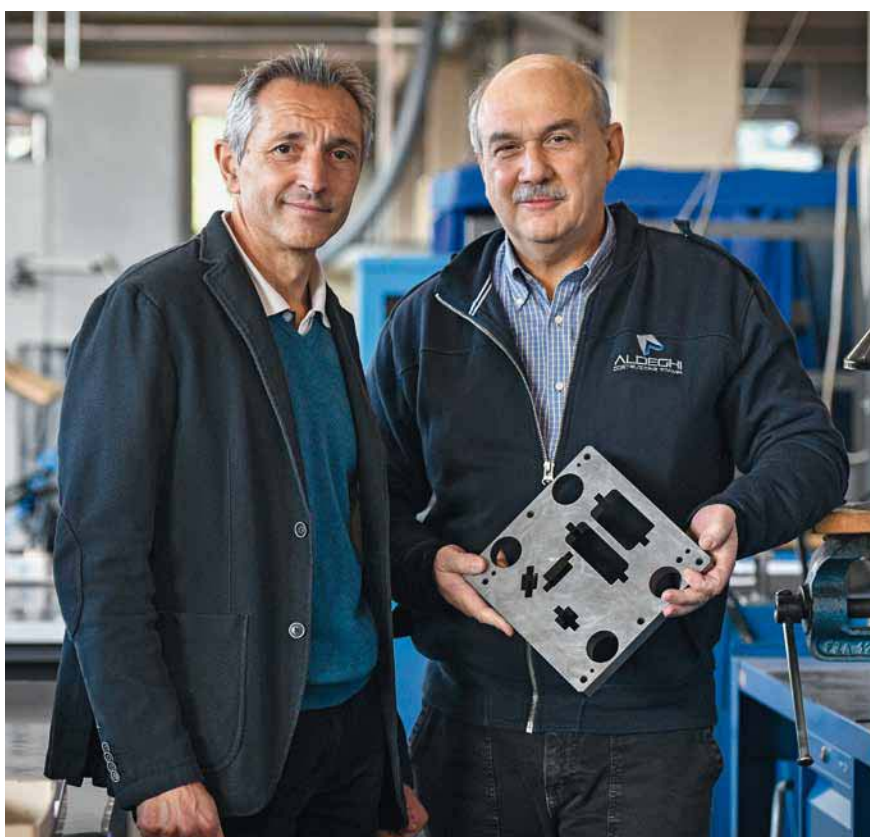
#### ALDEGHI

Precision mechanical workshop Aldeghi was founded in 1983 in the Italian province of Bergamo. In 2002 it became part of the M. S. Ambrogio Group. Over the years Aldeghi has stayed true to its origins as a family company, and today Cesare Aldeghi, son of founder Pietro Aldeghi, is the Managing Director. Serving customers in the automotive, electronic, and household appliance markets, the mold and tool maker relies on technologies from GF Machining Solutions.

In addition, customers can use the Messenger module to get instant access to all machine park data on their smartphones, such as information on machine status or programs. It is even possible to receive an alarm message from a machine or to send a service request via app. An important precondition for sharing this sensitive data is trust. Therefore, rConnect offers secure certified connections based on the latest technology. In 2017, GF Machining Solutions had already connected 20 percent of new machines delivered to customers with the rConnect platform. In 2018, this figure will be more than 1'000 machines, rising to an estimated 5'000 machines over the next four years.

#### Clear customer benefit

Precision mechanical workshop Aldeghi is already working with rConnect. The Northern Italian company manufactures molds, tools, and prototype mechanical products for companies in the automotive, electronic, and household appliance markets. The fact that Aldeghi turned to GF Machining Solutions for assistance with its first steps into digitalization is the natural continuation of a collaboration which started some 30 years ago. Today, nine machines from GF Machining Solutions are running at the Italian production facility. Six of these are equipped with a System 3R robot system, while rConnect LRA and Messenger are operating on three EDM machines from GF. ➤





› The benefits for the customer are clear. Thanks to rConnect, Aldeghi now have greater peace of mind when running their machinery unmanned in the evenings and on weekends, because the status of the machines can be checked remotely. "We wanted to ensure that Aldeghi was getting a solution that worked for them right from the start. So before the implementation, we performed extensive tests until Aldeghi's employees were comfortable with the rConnect features," says Enrico Borghi from GF Machining Solutions Customer Services Italy.

### Looking into the future

The world of digitalization is evolving rapidly and so is GF Machining Solutions' digital portfolio. Therefore, rConnect will soon be extended by modules for condition monitoring and predictive maintenance. With condition monitoring, operators will receive proactive updates on the current status of their machines, for example when wear parts are nearing their end of life or when consumables have almost run out. Predictive maintenance goes a step further. The data generated by the machine is analyzed with algorithms. This way, it becomes possible to predict when maintenance needs to be carried out – even before an alarm is triggered.

Operators of machine fleets equipped with rConnect benefit on many levels: faster diagnosis and interventions when machine issues arise, significantly less machine downtime which leads to higher continuous productivity. The soon-to-be-introduced modules for condition monitoring and predictive maintenance will help boost the effectiveness and service life of the entire machine fleet. But most of all, by integrating rConnect into their productions, as Aldeghi has done, machine operators are taking an important step towards smart factories. ■



## "With rConnect we can monitor our production from a mobile device."

**Cesare Aldeghi, Managing Director of Aldeghi, an Italian mold and tool maker, explains how rConnect is saving his employees time.**

### **Mr. Aldeghi, today, you are using rConnect in your production. With regard to maintenance, how were issues previously managed?**

Before rConnect was activated, requests for assistance were managed by contacting the GF support service. One of our employees had to explain the situation and carry out the checks according to the instructions of the GF Machining Solutions engineer. If the solution couldn't be found quickly, we had to arrange for a site visit. This cost time and money.

### **What changed with the introduction of Live Remote Assistance?**

Now, we can create a request for assistance directly from the LRA interface or the Customer Cockpit. This allows the GF Machining Solutions engineer to connect directly to the machine and carry out the checks without our assistance. In the meantime, we can continue with our work.

### **Has LRA led to improvements in uptime?**

Definitely. First of all, it reduces the time spent waiting for assistance and for faults to be identified. And more specifically, it reduces the hours our employees would otherwise spend on the phone and performing checks.

### **How about Messenger? How has that changed processes at Aldeghi?**

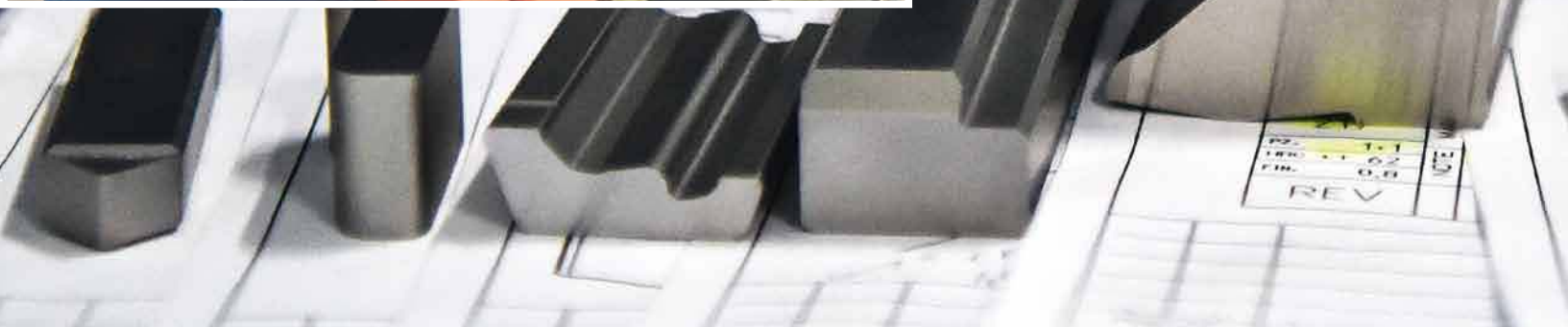
This is one of my favorite aspects of rConnect. When our machines are operating on an unmanned basis – for example during the night or on weekends – we can use the Messenger to monitor the progress from a mobile device. We instantly see how work is proceeding, and that gives us greater peace of mind. We've been waiting for this option for some time and are very happy to be able to use it at last. ■



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



Today, nine machines from GF Machining Solutions are running at Aldeghi. Six of these are equipped with a System 3R robot system, while rConnect is operating on three EDM machines.





OUR LOCATIONS  
**MILLS RIVER, USA**

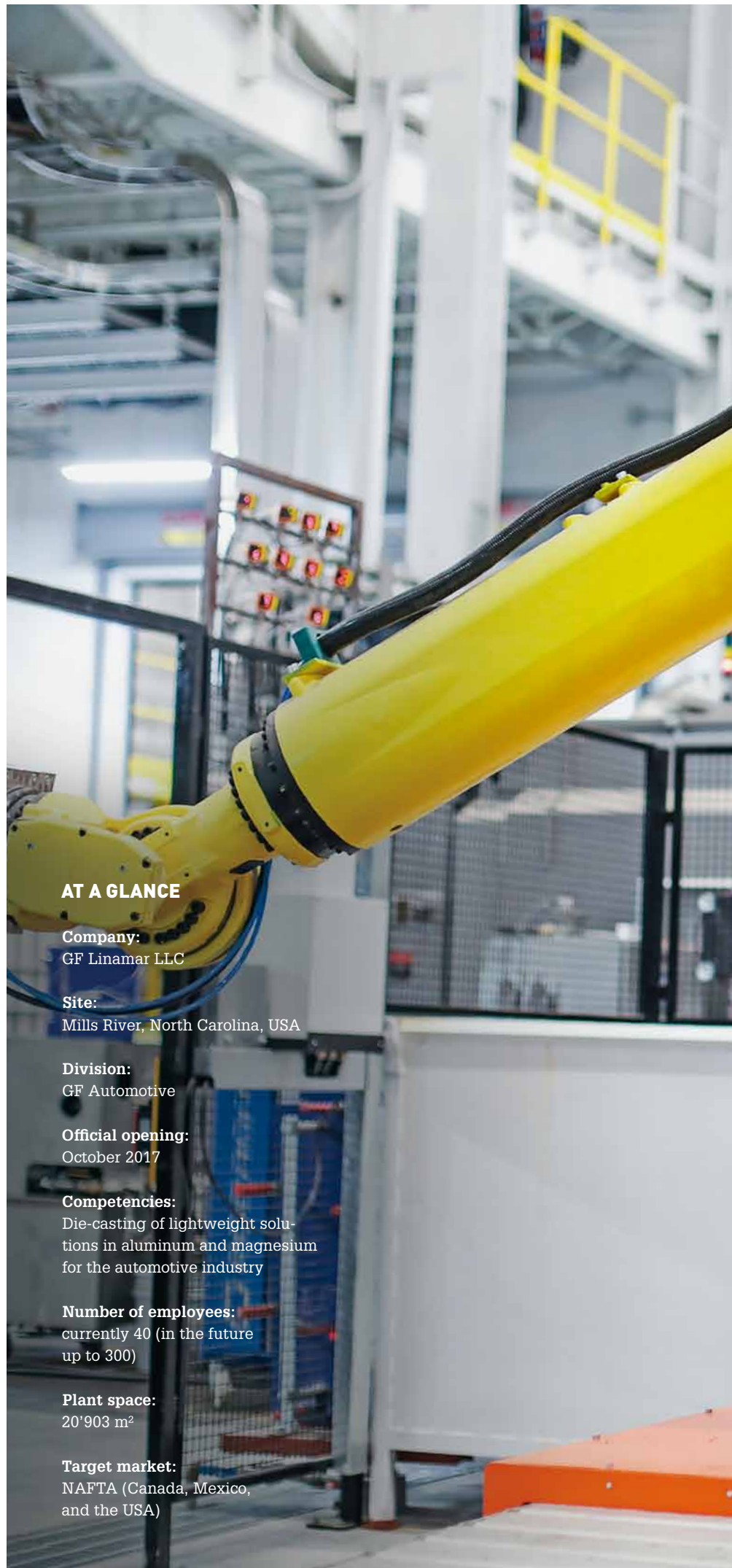


## A flagship facility ready for the future

The new site of **GF Automotive** and joint venture partner Linamar opened its doors in October 2017. Designed to meet the latest and highest standards for productivity, quality and environmental friendliness, the production facility in Mills River, USA, is fully automated and digitalized.

**W**hite, light, modern. This is the impression you get upon entering the halls of GF Linamar. Designed by GF and PI Engineering, the newly built production facility in Mills River, North Carolina, is breaking new ground. The high-pressure die-casting plant manufactures lightweight aluminum and magnesium parts for automotive OEMs (original equipment manufacturers) in the NAFTA market, which covers Canada, Mexico, and the USA.

Bathed in light, the plant is nearly monochromatic, with all walls painted white and new equipment. Large windows are installed throughout while LED lights provide a bright environment day and night for employee comfort and safety. The flagship facility embodies the best of what GF Automotive has developed and sets a new milestone in manufacturing. >



**AT A GLANCE**

**Company:**  
GF Linamar LLC

**Site:**  
Mills River, North Carolina, USA

**Division:**  
GF Automotive

**Official opening:**  
October 2017

**Competencies:**  
Die-casting of lightweight solutions in aluminum and magnesium for the automotive industry

**Number of employees:**  
currently 40 (in the future up to 300)

**Plant space:**  
20'903 m<sup>2</sup>

**Target market:**  
NAFTA (Canada, Mexico, and the USA)



**GF Linamar's production site in the USA** opened its doors in October 2017 and sets high standards with regard to digitalization and automation. Up to 300 employees will be able to work here in the future.





**Marc Holtkoetter – the enthusiast**

Marc Holtkoetter is excited about his new job at GF Linamar. “Being part of creating such a new entity and a new facility is a once-in-a-lifetime experience,” he says. The Head of Sales Office who recently moved to Henderson County enjoys seeing his young and highly skilled team grow and develop. When not focusing on work, Marc Holtkoetter spends time with his wife traveling and discovering new places.



**Olivia Randolph – the people person**

Accountant Olivia Randolph is a team player. “I love how close our team is,” she says. “Being in a green-field operation, everyone has had to put in a lot of hours. We all pitch in to help each other.” Combining business with pleasure, she became involved in local politics, where as secretary of her local precinct she can understand how changes at the state and local level might affect the business.

**Measuring 20’903 m<sup>2</sup>,** the new GF Linamar facility offers plenty of space for further growth.



› At the GF Linamar plant, decades of production experience in Austria, Germany, and China are combined with today’s technological advances. “Every aspect of the facility was planned meticulously: hardware and software, production floor layout and design, production flow, working environment, and safety as well as recyclability and sustainability for the next 50 years. Of course, this also includes potential for further automation and expansion,” says GF Linamar General Manager Carlos Vasto.

**Modeled after the best**

The plant operates in quite a futuristic way: “Our production processes are fully automated with robotics,” explains Carlos Vasto. “All production cells are standardized and modeled on our best in Europe.” Twelve die-casting cells are currently planned for the first phase. Aided by automatic guided vehicles, the production lines will manufacture various lightweight components: door frames, engine blocks, and cross car beams. The software that enables smart processes is constantly developed in order to keep up with the fast pace of the digital transformation.

**Well-qualified employees needed**

To run such an advanced and nearly autonomous manufacturing ecosystem, a well-qualified team is essential. Before any of the first 40 employees could start work at GF Linamar they underwent intensive training, some at the GF Automotive plants in Europe, and others at the Southeastern Advanced Molding Technology Education Center (SAMTEC) at the nearby Blue Ridge Community College. Supported by GF Linamar and established to meet its specific training needs, the center opened its doors in May 2017. An eight-week quality workforce training course for production employees and



**Twelve die-casting cells** for aluminum and magnesium components are currently in operation at the site. The number of cells is expected to more than double in the future.

a four-day program for administrative colleagues are in place at SAMTEC. In the future, an additional training course on tool making will also be available.

**Local investment, global cooperation**

The two joint venture partners GF and Linamar share responsibilities and tasks: all operational activities with regard to technology,







**«The location has been planned down to the smallest detail.»**

**Carlos Vasto**  
General Manager GF Linamar



production processes, and quality assurance are supported by GF Automotive. “The new US plant is part of the GF strategy to expand its global footprint in light metal and to serve key customers locally,” says Carlos Vasto. GF Automotive benefits from Linamar’s strong position in the NAFTA market while Linamar profits from the close relationship of GF Automotive to key European OEMs. By combining the strengths of both partners, the joint venture is able to offer ready-to-mount components.

The strategy has paid off. “We’ve had a very successful start,” says Carlos Vasto. “We have won several orders from American and European customers with operations in Mexico and the US.” GF Linamar has hit the ground running, with lifetime orders of around USD 800 million already secured.

**The quality promise**

But GF Linamar is also prepared for additional growth. Production capacity can more than double to a total of 26 die-casting cells, which can manufacture millions of parts. “Every single production line was planned to produce both magnesium and aluminum components,” explains General Manager Carlos Vasto. Should specifications and future trends change – for example, if aluminum is needed instead of magnesium, or vice versa – the die-casting cells have the flexibility to alternate alloys.

“Desirable growth is based on the outstanding quality that we stand for,” emphasizes Carlos Vasto. “Quality is the main premise.” This philosophy, backed by the whole of this unique enterprise, will guide GF Linamar well into the 21st century and beyond. ■



**Noora Viljanmaa – the global citizen**

World traveler Noora Viljanmaa feels at home at GF Linamar. Having lived in Finland, Germany, and Spain, she enjoys the diverse work environment. “Seeing the plant being built from the ground up and managing the organization of the official inauguration ceremony,” were real highlights, Noora Viljanmaa recalls. An avid hiker, she likes to explore the scenic beauty of the Blue Ridge Mountains and their endless trails.



**Frankie Rainey – the robot aficionado**

Frankie Rainey loves his job so much he considers it a hobby. The Automation Engineer has been with GF Linamar right from the beginning. He was responsible for setting up the first production cell tackling robotic and equipment interface issues. Not content with working on robotics in his professional life, Frankie Rainey attends robot conventions for fun. Hiking, camping, and fishing relax him. Lake Lure in North Carolina is his favorite destination.



More pictures and a time-lapse video of the construction of the new location at [globe.georgfischer.com](http://globe.georgfischer.com)

MY HOME  
TOKYO, JAPAN



**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.



## “Tokyo has a good balance between the old and the new”

In Japan we're fond of the natural phenomena that go with the changing seasons, like the cherry blossoms in spring, or the colorful leaves in fall. In Tokyo a great place to experience both is Hikarigaoka Park, where you can spend a nice day outside at the pond or the bird sanctuary. If you are interested in the history of the area, the library is the ideal spot to learn about it. But these are not the only reasons why this park is my favorite spot in Tokyo. What I really value are its sports fields, where I regularly play baseball with the team I manage in my free time.

Tokyo has a good balance between the old and the new: historical temples and palaces on the one hand, and huge shopping and

entertainment districts on the other. Plus it's a big city with 13.5 million people living on an area of 2'191 square kilometers. Everything is connected by the excellent subway system, which I use to commute to the office of GF Machining Solutions in Yokohama, southwest of Tokyo. Home for me is Tokyo's neighborhood of Takadanobaba with its university and many college students. We have plenty of restaurants serving ramen, a Japanese noodle soup that's popular among students – and basically everyone else too. ■



**Katsuyuki Tanaka**

has been working as a manager in the logistics department at GF Machining Solutions in Japan since 1997. When commuting to the office in Yokohama, he listens to music on his MP3 player.



# A day in Tokyo



MORNING

## TIME FOR CULTURE



Start the day with "the old," for example by visiting Sensoji Temple. The temple, which is dedicated to the Buddhist goddess Kannon, was completed in the year 645. If you are more into royals, take a look at the Imperial Palace, the residence of Japan's imperial family. Twice a day you can join a guided tour around the palace grounds.



NOON

## CULINARY CLASSIC

For lunch you can enjoy a bowl of ramen, a famous Japanese noodle soup. The noodles, typically made of wheat, are served in broth. Depending on the region, the broth could be based on soy sauce, miso, pork, or fish. The soup is then enriched with different toppings, like meat and vegetables. In Tokyo there are an estimated 5'000 ramen restaurants, so you're never far from Japan's most famous dish.



Gain an impression of how exciting life is in Japan's largest metropolis at [globe.georgfischer.com](http://globe.georgfischer.com)



EVENING

## HIGH IN THE SKY

End the day with "the new," for example by enjoying the sunset from the Tokyo Skytree, a television broadcasting tower and famous landmark of Tokyo. In fact, the Skytree is Japan's tallest building. For something closer to the ground, take a stroll through Shibuya, Tokyo's colorful shopping and entertainment district, where the night lights up like day with the many giant advertising and video screens, and join the enormous crowd of people at the famous crossing in front of Shibuya Station.



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# More on Globe Online!

You can now conveniently enjoy reading the magazine for GF employees on your smartphone or tablet, too. Click on in and make the most of a whole new reading experience:

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## COMPETITION

# Take your chance!

Win an iPad Air 2, Bose wireless headphones, or a JBL Bluetooth speaker. A prize draw will be held among all employees who send in entries under the sections **Hello!**, **3×3**, 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.

### 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.

**JOIN IN  
AND  
WIN!**

Here are the winners of the last competition:

- 1<sup>st</sup> prize:** Jesse Flores (GF Piping Systems in the USA)
- 2<sup>nd</sup> prize:** Stephanie Tan (GF Machining Solutions in Singapore)
- 3<sup>rd</sup> prize:** Elias Harder (GF Automotive in Switzerland)

All 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 March 23, 2018.**

