

Customer Services

Solutions for you



GF Machining Solutions: all about you

When all you need is everything, it's good to know that there is one company that you can count on to deliver complete solutions and services. From world-class electrical discharge machines (EDM), Laser texturing and Additive Manufacturing through to first-class Milling and Spindles, Tooling, Automation and software systems — all backed by unrivalled customer service and support — we, through our AgieCharmilles, Microlution, Mikron Mill, Liechti, Step-Tec and System 3R technologies, help you raise your game and increase your competitive edge.

Passion for Precision

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Your productivity is enhanced by a wide range of Customer Services solutions

Optimizing your productivity is at the heart of GF Machining Solutions' broad range of customizable Customer Services solutions. Close to you — wherever you are in the world — our local Customer Services teams speak your language, know your concerns, and deliver the expertise and products to reduce your total cost of ownership (TCO) and deliver best value the full life cycle of your machines.

Securing your sustainable success is our key competence, so you can work with confidence throughout the lifetime of your GF Machining Solutions Milling, EDM, and Laser machines. That's a promise only GF Machining Solutions can make — and keep.



GF Machining Solutions

Three levels of support

The availability of equipment, productivity and continuous improvement are essential drivers for your business. Therefore your service strategy today is a crucial success factor across the full lifetime of your business and machine tools. GF Machining Solutions Customer Services offers you a modular concept with three levels of support. Benefit from our services to answer your specific needs.

Operations Support

Solutions to boost your applications

Achieve optimum levels of performance and precision in your daily operations with certified consumables and original wear parts.



Machine Support

Securing your sustainable machining success

Optimize your uptime with original spare parts, expert technical support and preventive and advanced services.



Business Support

Realize the full potential of your equipment

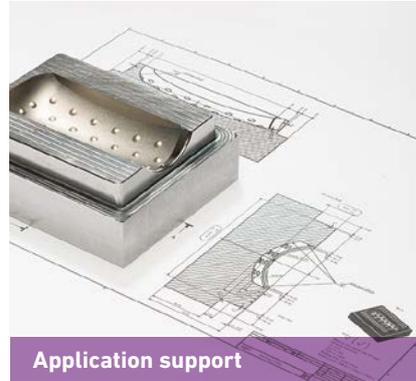
Add value to your capital machine investment as your business evolves, with solutions tailored to your specific needs.



Original wear parts



Helpline



Application support



Certified wires



Spare parts



Customer training



Electrodes



Service interventions



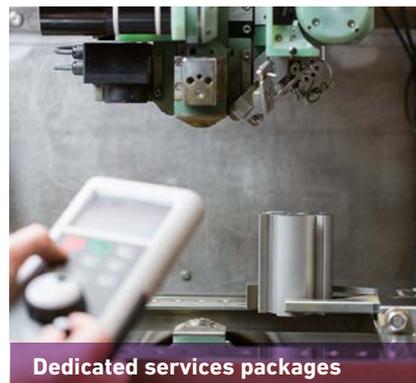
Upgrades and accessories



Filters and more



Preventive services



Dedicated services packages

Operations Support

Solutions to boost your applications

“Increase productivity up to 30 percent by using recommended certified consumables and original wear parts.”



Keep your equipment operating at peak precision and performance with our wide range of certified consumables and original wear parts. Create a reliable production and productive environment by using the components specifically designed and homologated to work together with your machine as a full solution. You work with confidence, knowing that your consumables and wear parts were developed with dedication to fulfilling your application needs.

Original wear parts

Our original wear parts are designed by our expert Research & Development with highest attention to the parts material, manufacturing processes and quality. All parts fit perfectly together and guarantee you the highest precision production environment.

- Ensure your optimal machining performance.
- Secure your uptime.
- Facilitate your daily maintenance tasks with wear parts kits.



+ Your benefits

Enhance the performance of your machines while optimizing your production costs and maintaining high quality results, with our original wear parts and certified consumables.



Certified consumables

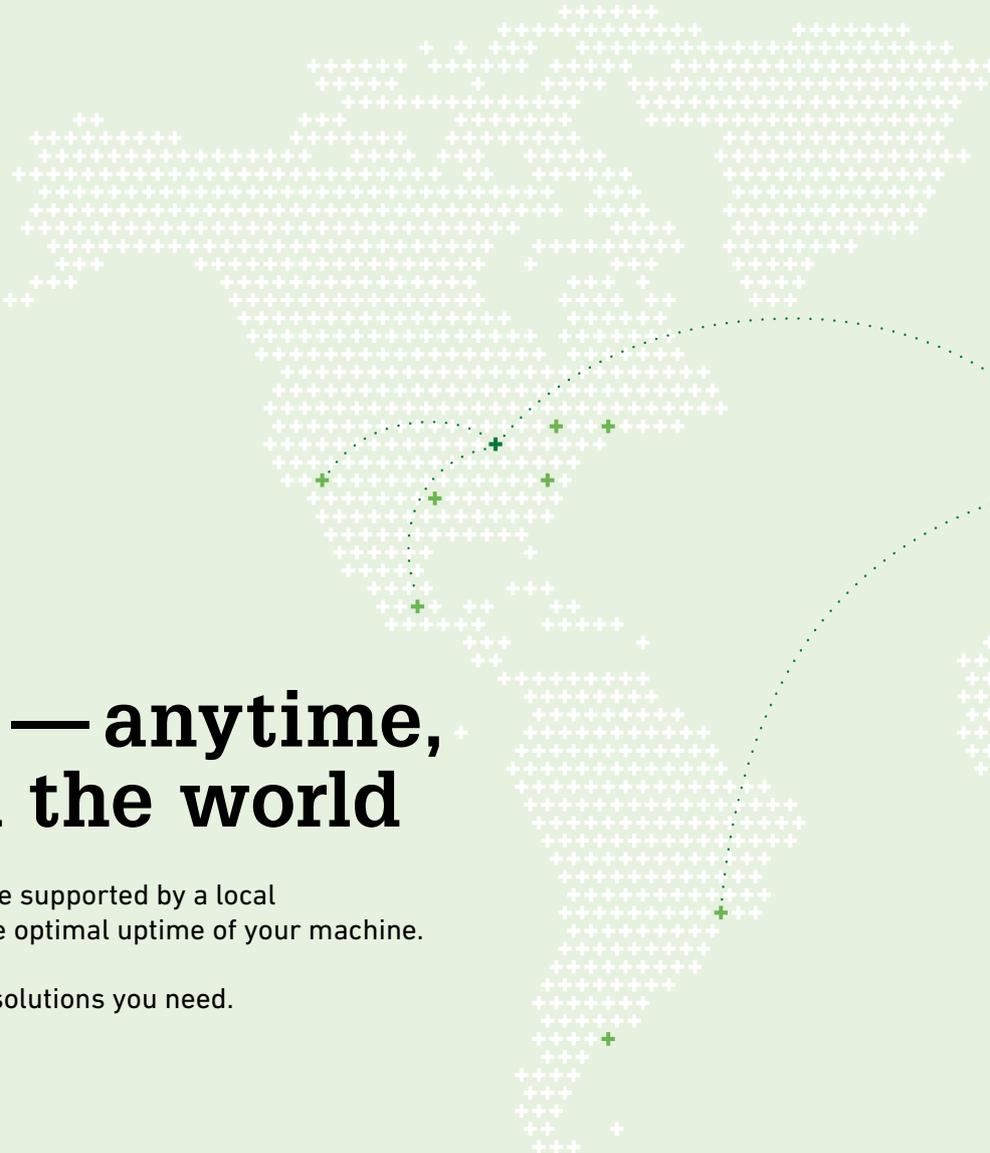
You profit from GF Machining Solutions' history as a machining technologies pioneer and our continuum of solutions, from machines to the consumables that support them. Achieve your best performance, whatever your application needs — precision, speed, surface quality or work piece complexity.

For your Milling, EDM and Laser machines, we have developed a full range of consumables, including certified wires, graphite and metallic electrodes, drilling electrodes, resins, filters, dielectrics and chemicals, allowing you to take your productivity to the next level.

Benefit from the know-how of a single partner in tune with your machine needs.

It's all just a click away in our online catalog.





Machine Support

Close to you — anytime, anywhere in the world

Wherever you are in the world, you are supported by a local Customer Services team to ensure the optimal uptime of your machine.

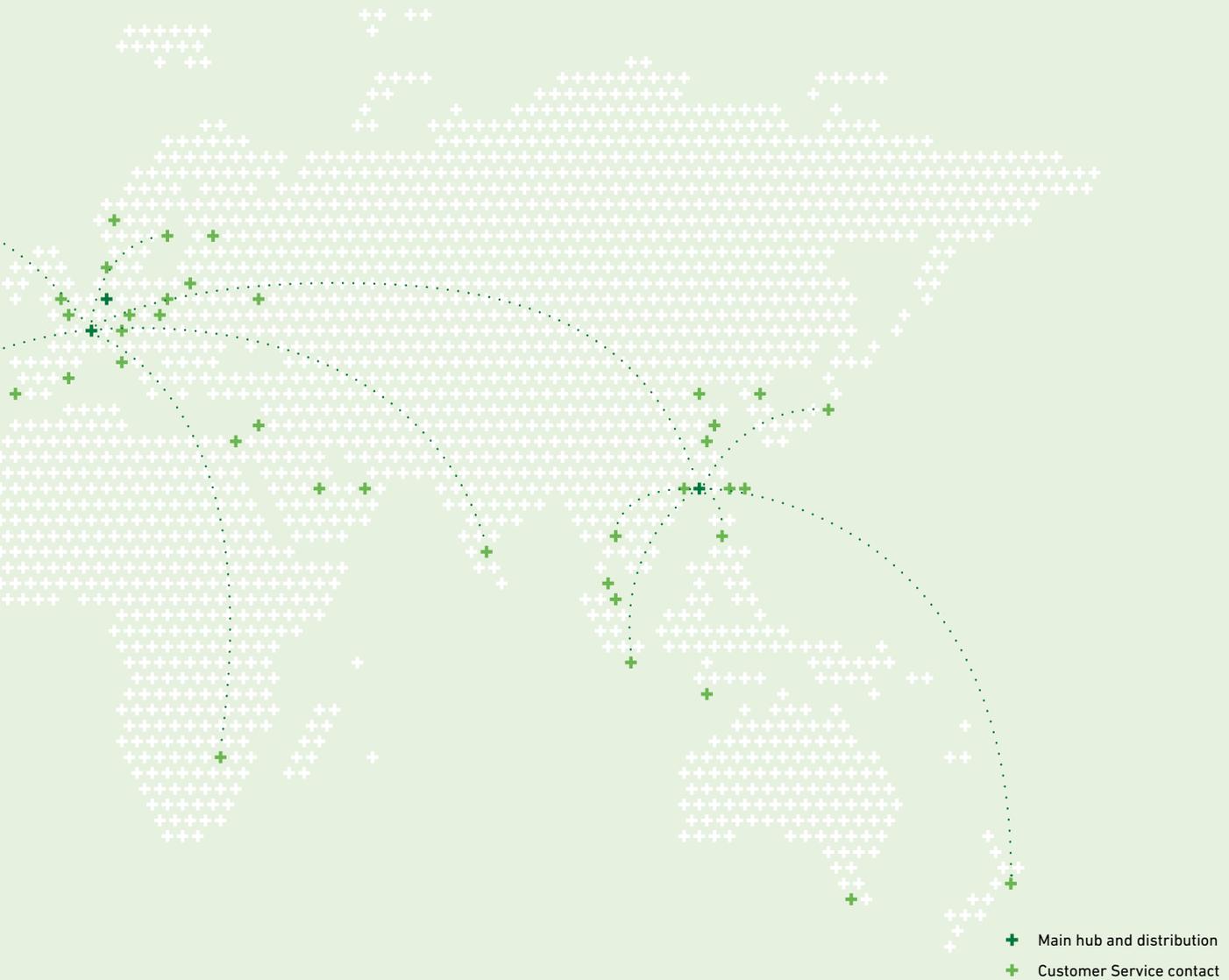
- We understand your needs.
- We are ready to quickly deliver the solutions you need.
- We speak your language.

“Get fast and **customer-specific support** in your local language, thanks to our presence on **50 sites worldwide.**”



Helpline

You get the fastest, most professional support from more than 100 experienced Helpline specialists with direct access to our global know-how network. Whether you need diagnosis or application support, parts identification support, or to schedule a quick service intervention, our Helpline has the solution.



Service intervention

Located close to you in 30 countries, our 800 experienced service engineers—regularly and rigorously trained through our own Service Academy—are your experts for machine issues, maintenance services and machine upgrades.



Your logistics

Highest uptime and productivity are ensured by the high availability and fast delivery speed of our original spare and wear parts. More than 97 percent of all critical orders are shipped the same day they're ordered, ensuring fastest delivery times to any location in the world from our main hubs in Switzerland, China and the United States.

Machine Support

Securing your sustainable machining success

With Machine Support, GF Machining Solutions offers you original spare parts, technical support and preventive services to operate your equipment in perfect order and condition and optimize your uptime.



“Avoid as much of **70 percent** of **machine downtime** by using **preventive services.**”

+ Your benefits

- **Maximize the uptime of your machine with predictive services.**
- **Ensure delivery of consistent quality to your customers.**
- **Increase the lifetime of your Milling, EDM and laser machines.**

Original spare parts

Get the best results in terms of productivity, accuracy, reliability and machine uptime, while benefitting from full warranty services, by using original spare and wear parts. It's easy to identify the correct part for your specific need, thanks to our parts experts. The result: you avoid machine downtime—up to 30 percent on average—caused by not using original parts.

Repairs/overhauls

Achieve highest precision throughout the lifetime of your machine, with our expert repairs of components such as Spindles or rotary tables. Your components are overhauled in our factory, and machines that have served you for many years are returned to their original state of precision and productivity.



Preventive services
 Maximize the availability, value, precision and productivity of your GF Machining Solutions equipment with our cost-effective, customer-centric and expert preventive and advanced services. You achieve optimal productivity and predictably uninterrupted uptime. From initial inspection to certification support, our service engineers are your expert partners for a wide range of success-triggering preventive services.

rConnect

From live remote assistance to ensure maximum machine uptime via process improvement modules to predictive maintenance and monitoring, our rConnect modular digital services keep you connected—at any time, wherever you are in the world. You select the rConnect services that best fit your individual needs.

Inspection

On-site analysis of the current condition of your equipment allows you to know the value of your machine at any time. With inspection we provide you detailed recommendations to recover optimal productivity.

Maintenance

Regular maintenance is the first step to ensuring the full productivity potential of your GF Machining Solutions machine fleet. During each visit, armed with detailed, customer-centric checklists, we use state-of-the-art measurement tools to painstakingly inspect exchange maintenance wear parts and adjust your machines.

Advanced preventive services
 You expertly respond to production changes like installation and air conditioning or your customer's need for extremely precision production, and your certification process is made easier—including the necessary quality follow-ups related to certification—thanks to our advanced services.

- + **Calibration by laser interferometer**
to guarantee maximum axis accuracy
- + **Geometrical control**
to prevent wear on machine components
- + **Circularity test with ball bar gauge**
to rapidly diagnose the performance of your machine
- + **Spindle services**
to maximize this critical part's uptime
- + **Accreditation support such as Nadcap or ISO compliance**
to facilitate your certification
- + **Customized services**
to answer your specific production needs

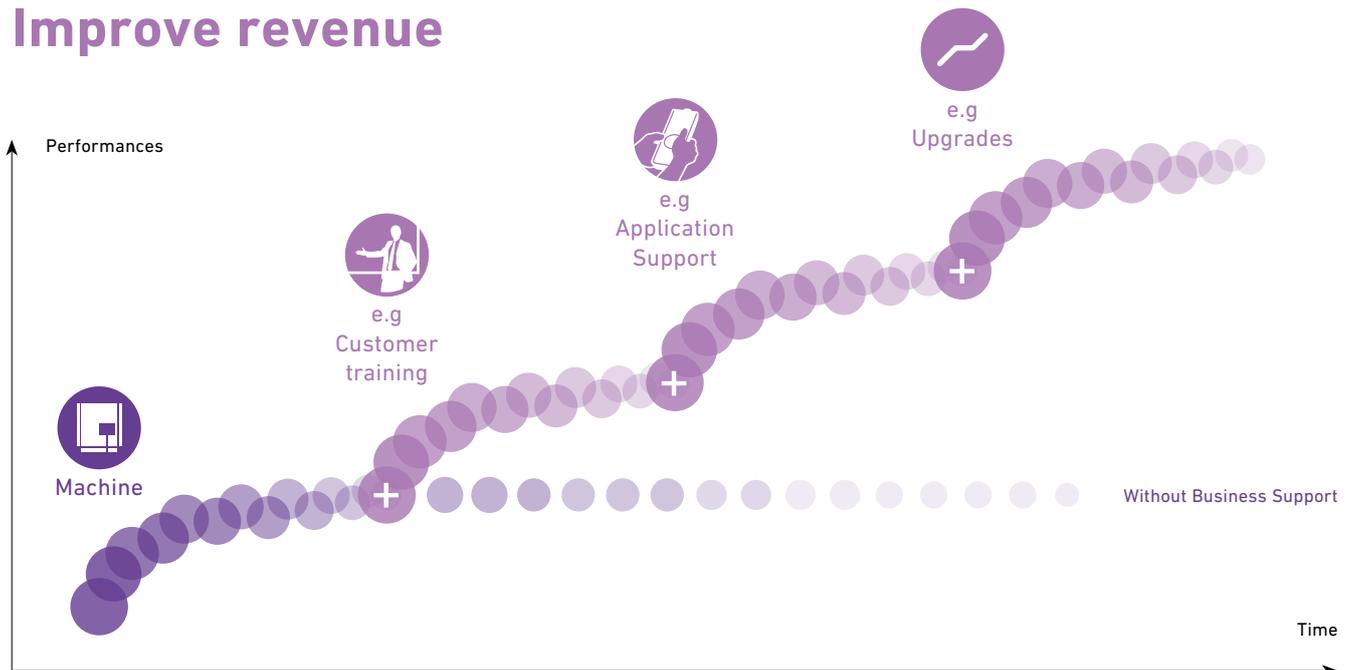


Business Support

Realize the full potential of your equipment

As your business evolves, so does its needs, and you can count on GF Machining Solutions for the individually tailored solutions to enhance your operational excellence. We help you keep pace with the continuously changing business and market environments and outperform your competitors.

Improve revenue



Customer training

Increase your productivity, motivate your employees, make true experts of your machine operators, and achieve better machining results with our modular, tailored training programs. Trainings can be conducted on your site or in our GF Machining Solutions Academy center close to you.



Upgrades, accessories and automation

Your machines achieve higher sustainable productivity—even after several years of use—thanks to our upgrades, and System 3R Automation and Tooling. These solutions are specifically developed and designed to add value to original machine investment in order to help you stay in line with your industry's needs. Increase your production capability step by step as needed throughout the lifetime of your equipment.



“Boost your machine’s potential by as much as 50 percent with expert training and support.”

Dedicated services solutions

In pursuit of highest business sustainability, you must overcome challenges specific to your production environment. GF Machining Solutions’ worldwide presence and large range of services—from dedicated consumables and preventive services to application support—provide you with tailor-made service solutions to ensure:

- Long-term cost predictability
- Extremely high machine availability
- Global protection of your machine fleet, anywhere in the world
- Production process optimization solutions

GF Machining Solutions



EDM (electrical discharge machining)

AgieCharmilles wire-cutting, die-sinking and hole-drilling machines

For over 60 years we have been at the forefront of every EDM development: designing and refining the EDM process and building machine tools that deliver peerless part accuracies, surface finishes, cutting speeds and process reliability. Today, our AgieCharmilles wire-cutting, die-sinking and hole-drilling machines are recognized throughout the world as the best in the business. Our continuous research and development in digital generator technology, control systems and integrated Automation systems are evidence of our commitment to keeping your EDM operations on the leading edge of technology.



Laser

AgieCharmilles Laser texturing machines

Laser texturing is a fully-digitized surface engineering process that has huge potential. The technology enables precise 2D and 3D textures or engravings to be machined accurately and directly onto complex parts or molds to improve and alter their aesthetic appeal, functionality and performance. The process is infinitely repeatable and offers many distinct environmental and economic advantages over conventional texturing processes.

Laser Additive Manufacturing (AM)

GF Machining Solutions and 3D Systems, a leading global provider of additive manufacturing solutions and the pioneer of 3D printing, have partnered to introduce new metal 3D printing solutions that enable manufacturers to more efficiently produce complex metal parts.



Tooling and Automation

System 3R Tooling, Automation and software

Productivity is the key to manufacturing success, and automating a manufacturing process is a proven method of increasing its efficiency, effectiveness, quality and reliability. System 3R's integrated Tooling, Automation and software solutions ranging from simple workpiece pallet and electrode changers through to flexible manufacturing and robot handling systems are guaranteed to help you increase their competitive advantage.



Milling

Mikron MILL S (high-speed Milling), Mikron MILL P (high-performance Milling) and Mikron MILL E (high-efficiency Milling)

Customers operating in the mold, tool and die and precision component manufacturing sectors stake their reputations on being able to quickly and cost-competitively meet their customers' demands. That's why they invest in GF Mikron machines. Incorporating the latest and most advanced technologies and premium-performance components, Mikron MILL S, Mikron MILL P and Mikron MILL E machines help you increase your production capabilities and improve your productivity. Designed and built for speed, accuracy and reliability, the machines, like you, are proven performers.

Liechti dedicated aerospace and energy machining centers

Aerospace and power generation turbine manufacturers increasingly turn to Liechti dedicated five- and six-axis machining centers to machine complex, high-precision airfoils on blades, disks, blings, blisks/IBRs and impellers. It's easy to see why because these machines, with their specific profile machining technology, specialized CAD/CAM software and engineering competence for ultra-dynamic machining in titanium, Inconel, nimonic, titanium-aluminide and high-alloy steels, yield productivity gains as much as 30 percent, thanks to reduced machining times. In the globally competitive aerospace and power generation manufacturing sector, that's definitely worth shouting about.

Step-Tec Spindles

At the heart of every GF Mikron machining center is high-performance Step-Tec Spindle. Step-Tec Spindles are essential core components of our machining centers. Highly accurate and thermally stable Step-Tec Spindles ensure that our machines can handle everything from heavy-duty roughing to fine-finishing operations.



Customer Services

Operations Support, Machine Support and Business Support

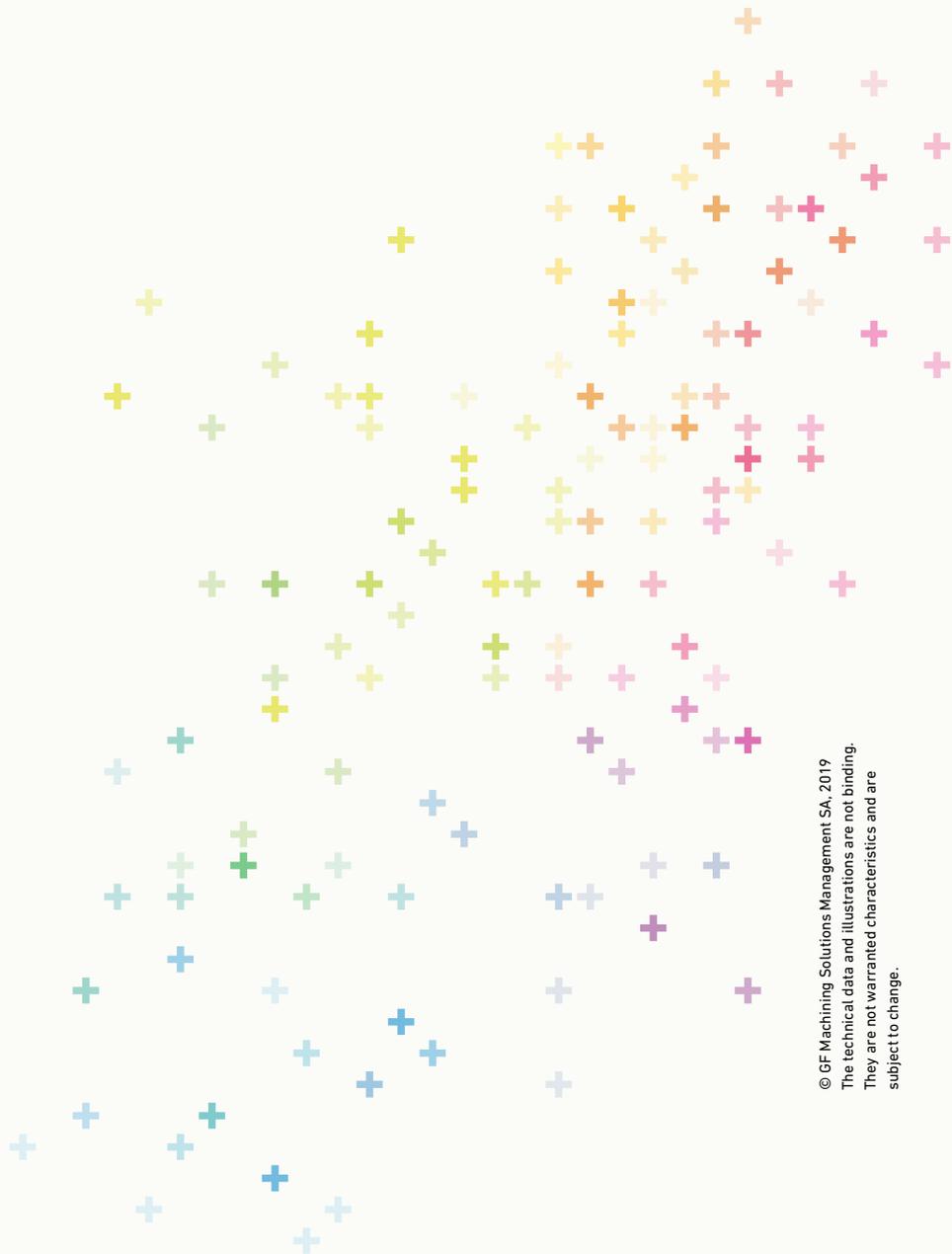
To help you get the most and the best from your machine tools and equipment, we offer three levels of support. Operations Support covers our range of original wear parts and certified consumables (EDM wires, filters, resins, electrodes etc.) to ensure that your machines are performing at the highest levels. Machine Support maximizes, through our best-in-class technical support, preventive services and quality spare parts, your machine tool uptime. Business Support is designed to help you make a real step-change in your productivity and performance with solutions tailored to your specific needs.



At a glance

We enable our customers to run their businesses efficiently and effectively by offering innovative Milling, EDM, Laser, Additive Manufacturing, Spindle, Tooling and Automation solutions. A comprehensive package of Customer Services completes our proposition.

www.gfms.com



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