

Academy training



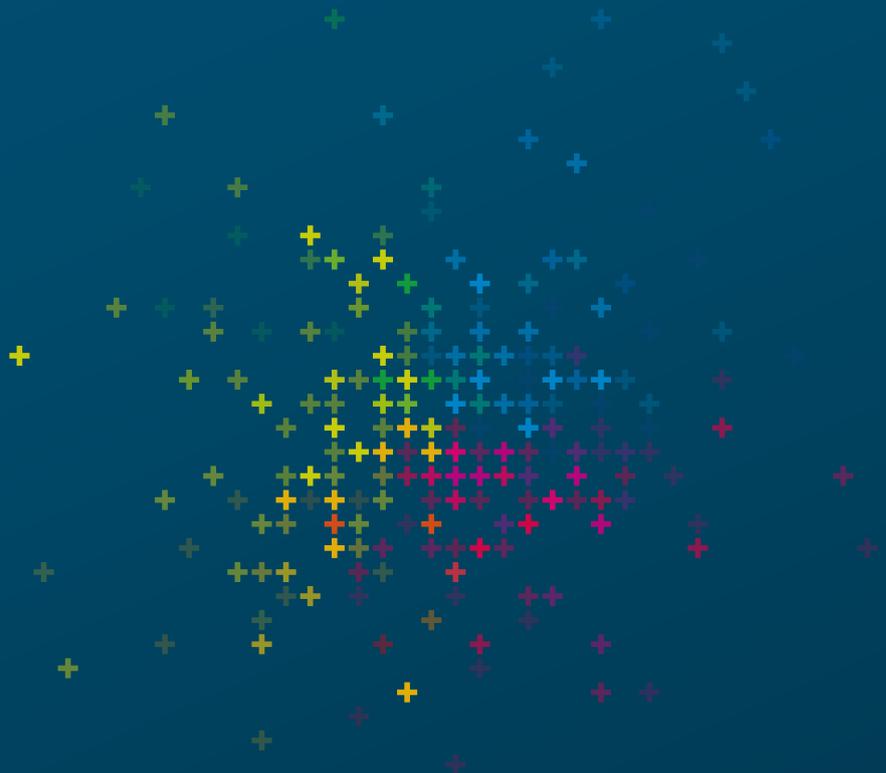
LASER



Passion for Precision

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.



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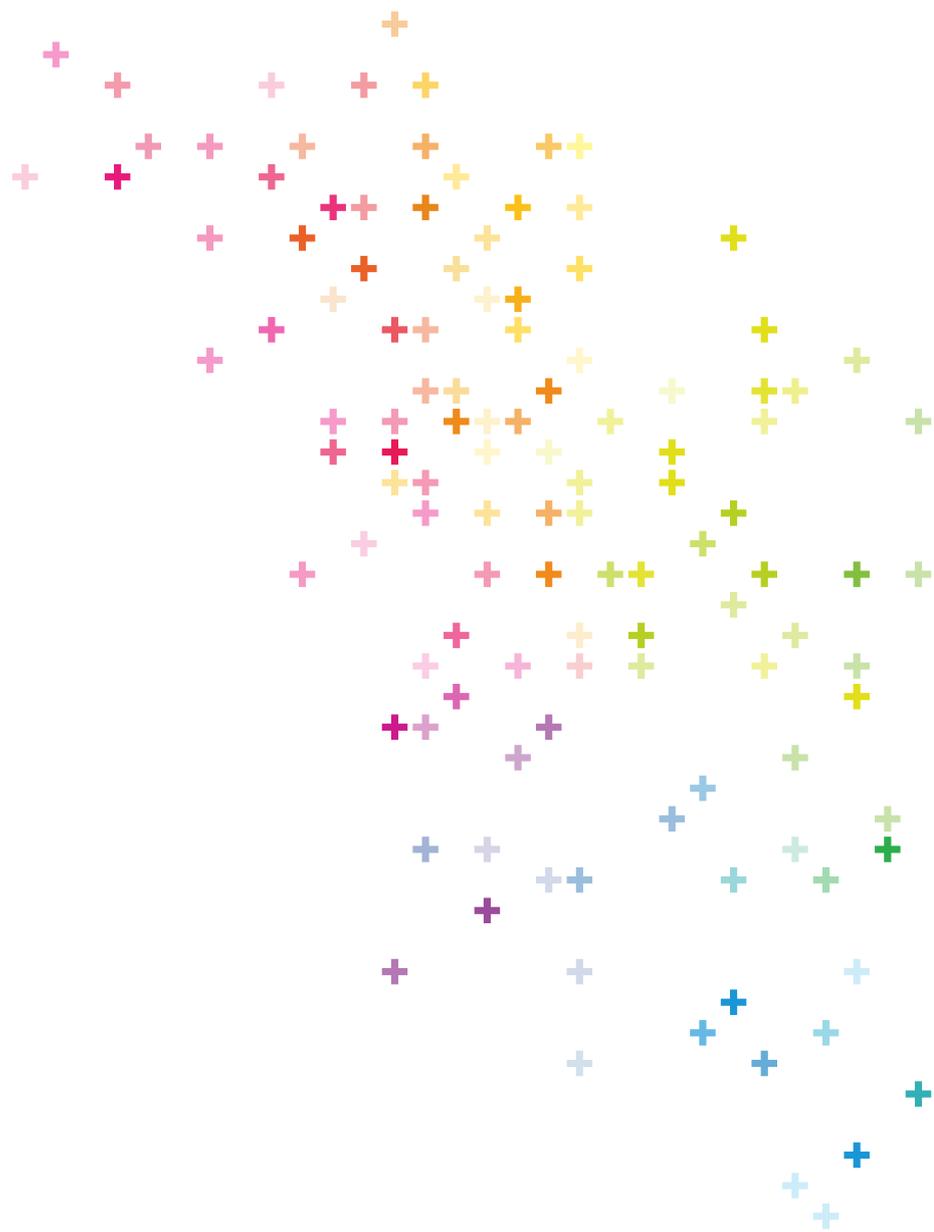
LASER

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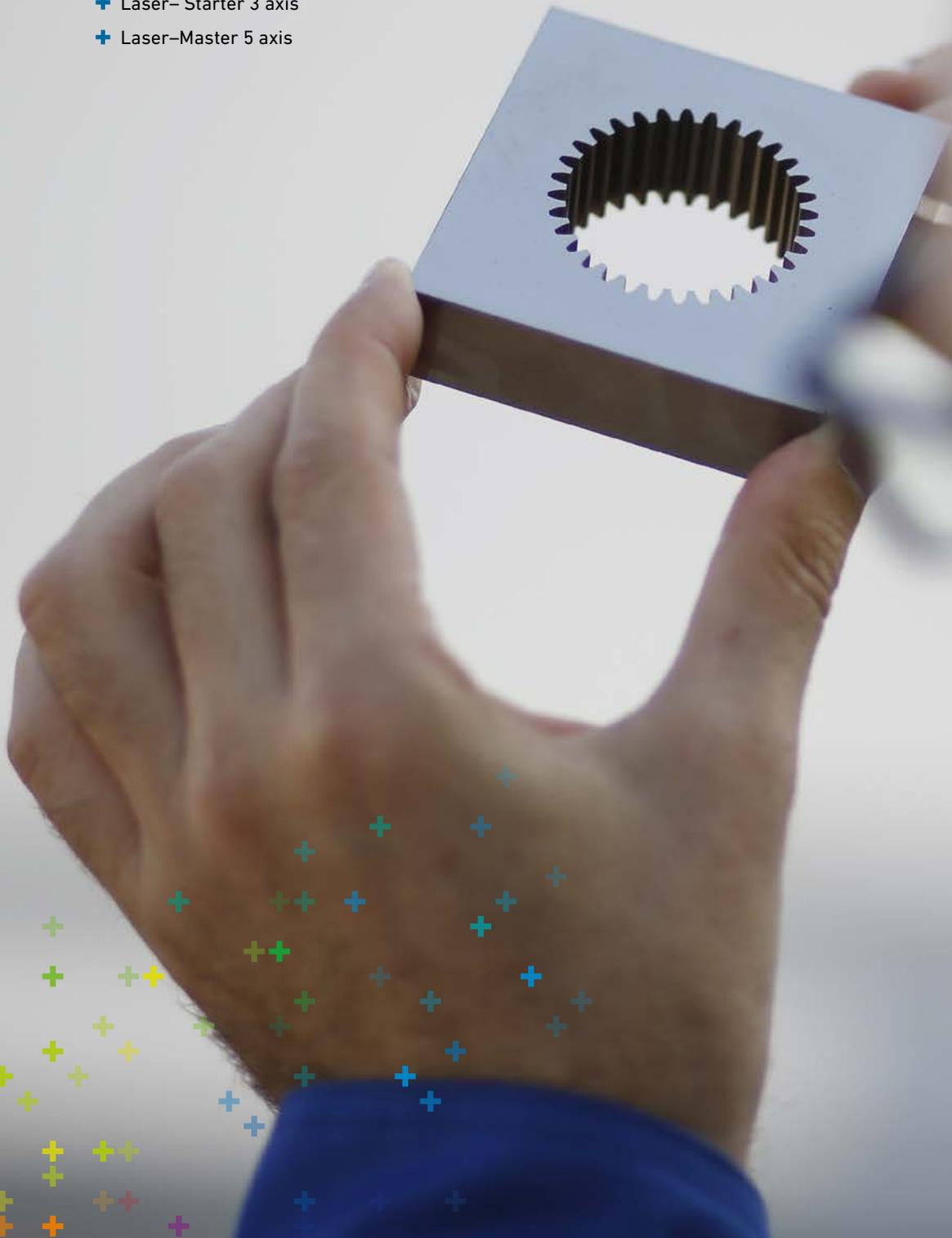
Learn to operate

We provide you with indepth training to share with you the basic knowledge to use your new machine autonomously/independently.



LASER

- + Laser- Starter 3 axis
- + Laser-Master 5 axis



Learn to operate training

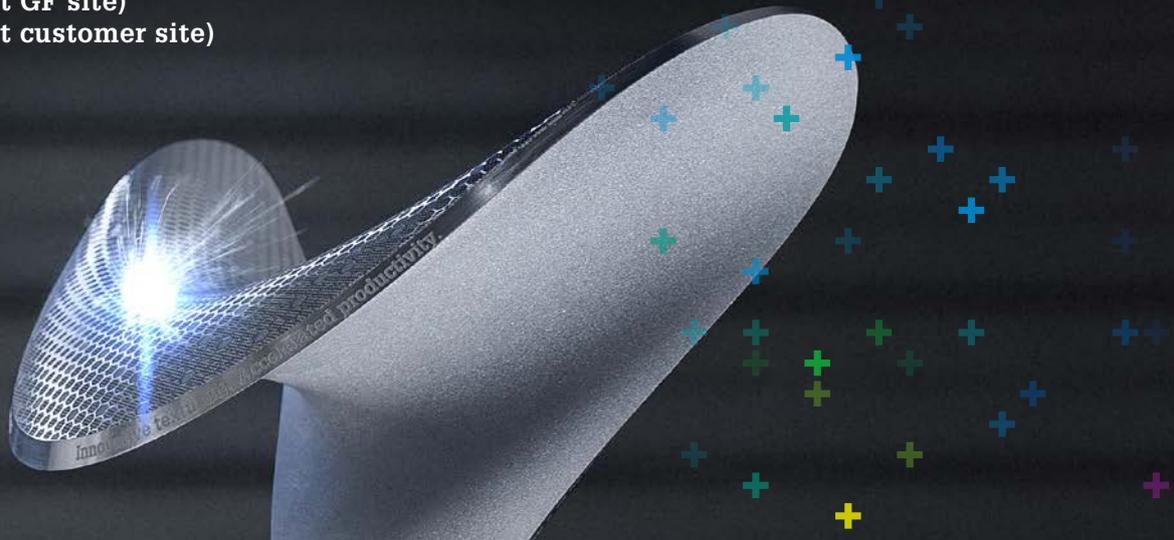
LASER Starter 3 axis

article n°200010481 (at GF site)

article n°200010482 (at customer site)



Laser



Duration	Number of participants	Experience level	Requirements	Machines
4 days	4	Beginner	Basic skills on Rhino CAD/CAM software	LASER P 400 U, LASER P 600/1000/1200 U, LASER P 4000 U, LASER S 1000/1200 U

Enter efficiently in the world of digital training

What are the course contents?

- + Specifications of the Laser process
- + Security
- + First machining approach
- + Laser Marking Control System (LMCS) human-machine interface (HMI) and programming software overview
- + Three axis-mode systems and machining coordination
- + Machining capability and its options
- + Basic maintenance

What is the course objective?

- + To learn how to use productively your Laser machine

What are the course benefits?

- + Become autonomous with use of basic three-axis machine
- + Able to select the right parameters according to the job
- + Capable of following the basic instructions to achieve the best precision
- + Can manage the basic maintenance of the machine

Maximize performance training

LASER Master 5 axis

article n°200010485 (at GF site)
article n°200010486 (at customer site)



Laser

Duration	Number of participants	Experience level	Requirements	Machines
4 days	4	Beginner	LASER-Starter	LASER P 400 U, LASER P 600/1000/1200 U, LASER P 4000 U, LASER S 1000/1200 U

Master texturing, structuring, engraving on the most complex 3D surfaces

What are the course contents?

- + Specifications of Laser process in five-axis mode
- + Systems coordination and Laser head movements
- + Laser Marking Control System (LMCS) human-machine interface (HMI) and programming software overview
- + Digitalization of the workpiece and shape preprocessing with meshed structure
- + Editing for texture image and mapping for machining complex parts
- + Machining capabilities and its options

What is the course objective?

- + Machinig with precision on 3D complex surfaces

What are the course benefits?

- + Become autonomous with use of basic five-axis machine
- + Be able to select the right parameters according to the job
- + Be capable of following the basic intructions to achieve the best precision

Dedicated training

Customized training based on your specific needs to increase your knowledge and machine performance.





Training for all level

Dedicated training

article n°200011001 (at GF site)

article n°200011002 (at customer site)

Duration	Number of participants	Experience level	Requirements	Machines
Based on your needs	Based on your needs	All levels	Based on your expectations	For all technologies

Realize the full potential of your machine with training customized to your needs

What are the course contents?

- + Adapted to your machine
- + Adapted to your operator's skill level
- + Adapted to your business needs

What is the course objective?

- + Provide your operators with the key knowledge to achieve your business objectives.

What are the course benefits?

- + Acquire the knowledge essential to successful machining.

About GF Machining Solutions

Multi-technology solutions provider

Our commitment to you and your specific applications is proven by the value-adding intelligence, productivity and quality delivered by our multi-technology solutions. Your success is our chief motivator. That's why we are continuously advancing our legendary technical expertise. Wherever you are, whatever your market segment and whatever the size of your operation, we have the complete solutions and the customer-centric commitment to accelerate your success—today.

EDM (Electrical Discharge Machining)



Wire-cutting EDM

GF Machining Solutions' wire-cutting EDM is fast, precise and increasingly energy efficient. From ultraprecise machining of miniaturized components down to 0.02 mm to powerful solutions for demanding high-speed machining with respect to surface accuracy, our wire EDM solutions position you for success.

Die-sinking EDM

GF Machining Solutions is revolutionizing die-sinking EDM with features like iGAP technology to dramatically boost machining speed and reduce electrode wear. All of our die-sinking systems offer fast removal and deliver mirror finishes of Ra 0.1 µm (4 µin).

Hole-drilling EDM

GF Machining Solutions' robust hole-drilling EDM solutions enable you to drill holes in electrically conductive materials at a very high speed—and, with a five-axis configuration, at any angle on a workpiece with an inclined surface.

Milling



Milling

Precision tool and mold manufacturers enjoy a competitive edge with our Mikron MILL S solutions' fast and precise machining. The Mikron MILL P machines achieve above-average productivity thanks to their high performance and Automation. Customers seeking fastest return on investment benefit from the affordable efficiency of our MILL E solutions.

High Performance Airfoil Machining

Our Liechti turnkey solutions enable the highly dynamic manufacturing of precision airfoils. Thanks to the unique performance and our expertise in airfoil machining, you increase productivity by producing at the lowest cost per part.

Spindles

As part of GF Machining Solutions, Step-Tec is engaged in the very first stage of each machining center development project. Compact design combined with excellent thermal and geometric repeatability ensure the perfect integration of this core component into the machine tool.

Advanced manufacturing



Laser texturing

Aesthetic and functional texturing is easy and infinitely repeatable with our digitized Laser technology. Even complex 3D geometries, including precision parts, are textured, engraved, microstructured, marked and labeled.

Laser micromachining

GF Machining Solutions offers the industry's most complete line of Laser micromachining platforms optimized for small, high-precision features to meet the increasing need for smaller, smarter parts to support today's leading-edge products.

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 produce complex metal parts more efficiently.

Tooling and Automation



Tooling

Our customers experience complete autonomy while maintaining extreme accuracy, thanks to our highly accurate System 3R reference systems for holding and positioning electrodes and work pieces. All types of machines can easily be linked, which reduces set-up times and enables a seamless transfer of workpieces between different operations.

Automation

Together with System 3R, we also provide scalable and cost-effective Automation solutions for simple, single machine cells or complex, multi-process cells, tailored to your needs.

Software



Digitalization solutions

To drive its digital transformation, GF Machining Solutions acquired symmedia GmbH, a company specialized in software for machine connectivity. Together, we offer a complete range of Industry 4.0 solutions across all industries. The future requires the ability to adapt quickly to continual digital processes. Our intelligent manufacturing offers embedded expertise, optimized production processes, and workshop Automation: solutions for smart and connected machines.

Customer Services



Worldwide for you

Ensuring the best performance throughout the lifetime of our customers' equipment is the goal of our three levels of support. Operations Support offers the complete range of original wear parts and certified consumables. Machine Support includes spare parts, technical support, and a range of preventive services to maximize machine uptime. Business Support offers customer-specific business solutions.



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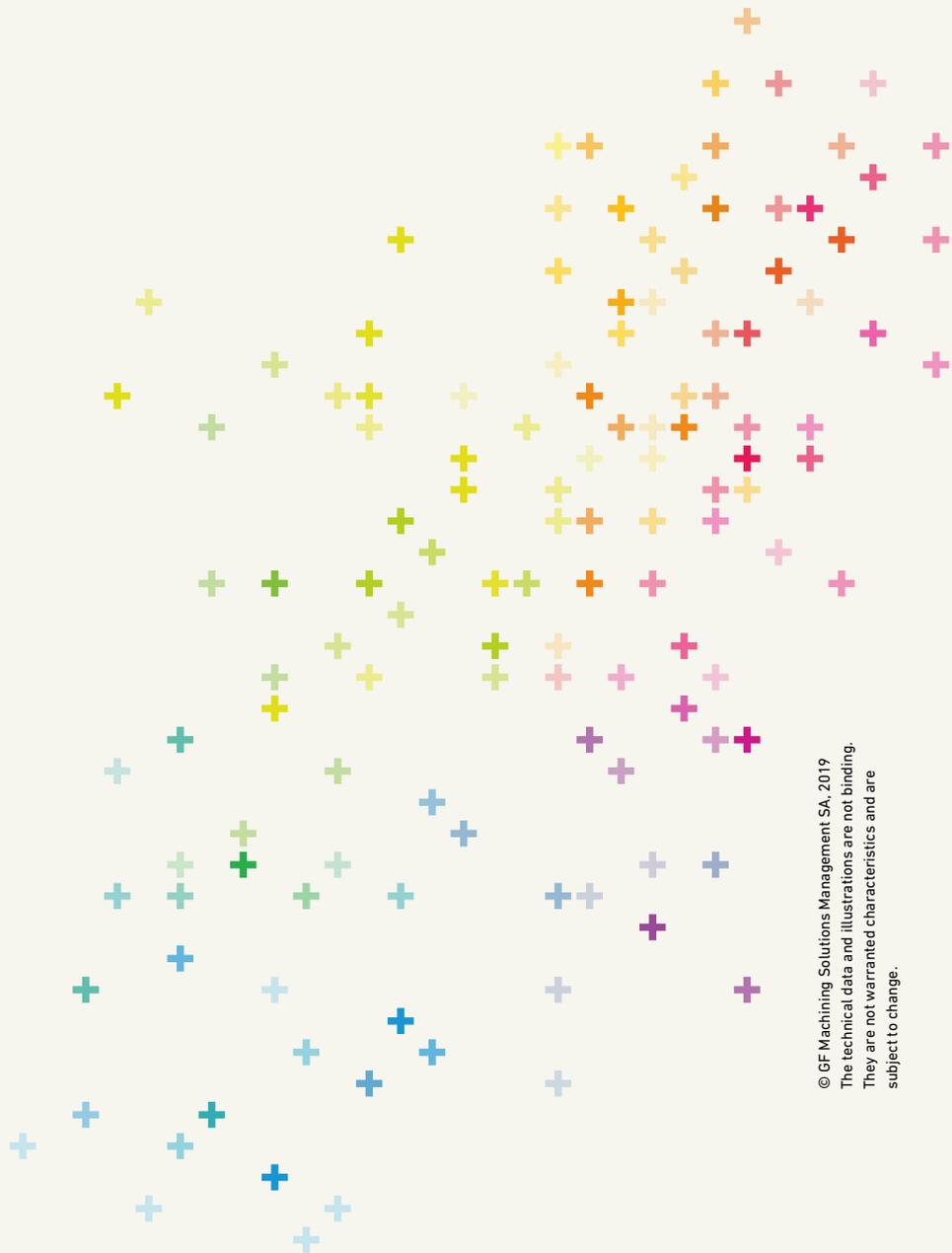
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At a glance

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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