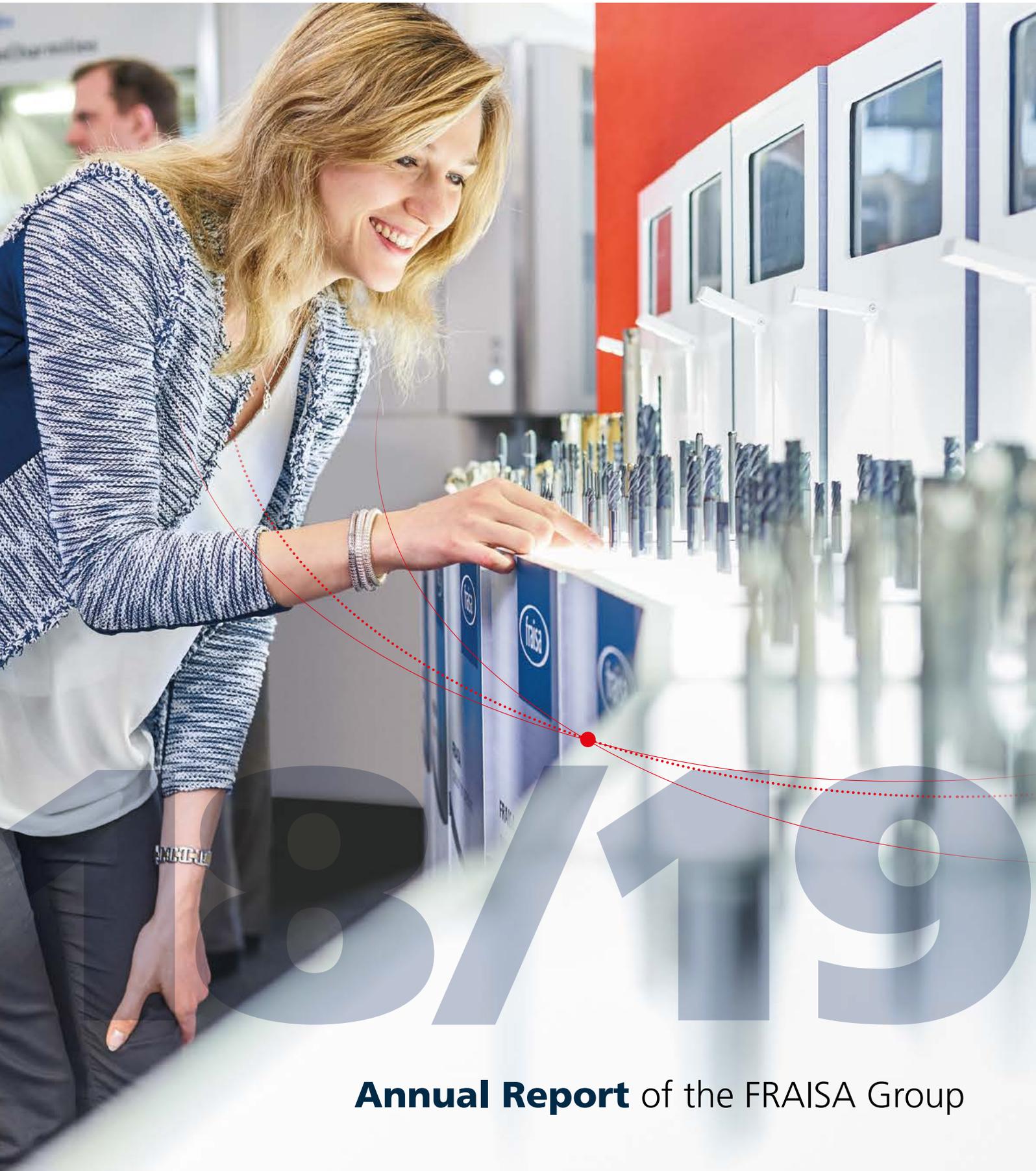


passion
for precision



Annual Report of the FRAISA Group

Board of Directors and Executive Board



Board of Directors and Executive Board of FRAISA Holding AG

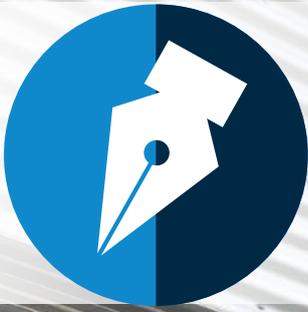
(from left to right)

Thomas Nägelin, Dr. Markus Schibli, Dr. Fritz Gantert, Josef Maushart, Prof. Dr. Peter Ruf, Charlotte Froelicher-Stüdeli, Hanspeter Kocher, Florian Maushart, Ursula Maushart, Dr. Dirk Kammermeier

Contents

Board of Directors and Executive Board	2
Contents	3
Editorial	4–5
Key Figures	6–9
- Overview of the group's key figures.....	6–7
- Company, targets and business development	8–9
FRAISA at the Customer	10–25
- Extent of the Product Range, quality, delivery logistics (e.g. Germany)	10–11
- FRAISA services (e.g. Switzerland).....	12–13
- FRAISA ToolExpert 2.0 (e.g. France)	14–15
- FRAISA ToolSchool (e.g. Italy)	16–17
- FRAISA ReTool® (e.g. Germany)	18–19
- FRAISA ConcepTool (e.g. Hungary).....	20
- FRAISA projects (e.g. Switzerland)	21
- FRAISA customer service & roadshows (e.g. France).....	22
- FRAISA ToolCare® (e.g. USA)	23
- FRAISA China.....	24–25
Network of the FRAISA Group	26–27
Sustainable Development	28–35
- Values.....	28–29
- Innovations	30
- Products.....	31
- Health and Occupational Safety	32
- Resources.....	33
- Training.....	34–35
Corporate governance bodies	36–40





EDITORIAL





Editorial

Dear Customers and Colleagues, Dear Readers

Networking is the magic word in today's business world. There is no doubt that networking creates added value. By networking our IT systems, we improve our services and reduce our costs. Despite all the IT networking, however, our main focus is still on the networking of people here at FRAISA.

Personal contact creates trust and enables the creation of new, innovative ideas for the challenges of today's production. It is the personal contacts of our technical consultants, our ToolSchool team and our developers that inspire us to further develop our products and services.

"Personally networked people in a technically networked world" is our recipe for success. In the 2018/19 financial year we were again able to provide support for more partners than in the previous years. Thanks to them, our turnover grew by 7% to CHF 110 million. Our corporate success also continued to improve thanks to permanent process optimization. With the establishment of the FRAISA branch in Shanghai in the summer of 2018, we can now also offer extensive direct customer contact in China.

I would like to thank you, our customers, for the trust you have placed in us. I also thank my 547 colleagues for the passion with which they live the FRAISA spirit every day and support our partners.

Now I hope that reading through our Annual Report will provide you with plenty of inspiration. We have compiled examples of outstanding successful cooperation with partners from all over the world. I wish you all the best for the 2019 financial year.

Yours sincerely,

Josef Maushart

Chairman of the Board of Directors and Chief Executive Officer

[5]



KEY FIGURES

547

EMPLOYEES

529.3

FULL-TIME EQUIVALENTS¹

108

 million
CHF

BALANCE SHEET TOTAL²

66.8

 million
CHF

(61.9%) **EQUITY**²

TURNOVER²

110.0

 million
CHF

EBITDA²

26.9

 million
CHF

(24.5%) OF TURNOVER

EXPENDITURE

6.6

 million
CHF

for **product** and **technology development**

INVESTMENTS

9.5

 million
CHF

in **machines, plants, vehicles**
and **properties**

¹ As per February 28, 2019.

² According to SWISS GAAP FER.

Overview of the group's key figures

(Financial figures according to SWISS GAAP FER)



RESULT²

14.5 million CHF

(13.2%) OF TURNOVER

PRODUCTION AND RETAIL SPACE³

21,659 m²

489

(89.4%)

EMPLOYEES

WITH COMPLETED PROFESSIONAL TRAINING

160

(29.3%)

EMPLOYEES

WITH HIGHER EDUCATION

23

(4.2%)

EMPLOYEES

IN THE DUAL VOCATIONAL TRAINING SYSTEM (CH AND D)

³ The total area is divided up as follows:

Production: 14,845 m², **Logistics:** 1,886 m², **Sales:** 2,295 m², **Administration:** 1,811 m², **R&D:** 822 m².



KEY FIGURES



[8]

Company, targets and business development

The FRAISA Group can once again look back on a successful financial year. Turnover increased by 7.1 % compared to the previous year and reached a value of CHF 110 million.

Thanks to the consistent implementation of automation projects, continuous process optimization and a positive currency development, a best-ever result was achieved for the third time in succession. As a result, profits increased by 18.4 % to CHF 14.5 million.

One basic prerequisite for improving efficiency is investments in automation, new technologies and ongoing renewal investments. CHF 9.5 million was invested in the past financial year, with the largest shares flowing to the production sites in Switzerland (42 %), Hungary (34 %) and Germany (12 %).

In the annual risk review we are repeatedly confronted with new risks and changed valuations. We still consider the risk of distortions in the global economy to be relevant. Against this background, we are pleased that we have good earning power, high levels of liquidity and a solid equity ratio of 62 %.

These are essential prerequisites for being able to successfully master even difficult economic crises.

For the current 2019/20 financial year, we initially expect a continuation at a high level, although from the middle of the year we are expecting an economic slowdown. Against this background, we expect volume growth of 3 to 4 % and a continuing solid earnings situation.

As we are certain that we are able to produce competitively in Switzerland as well, FRAISA is putting its faith in Switzerland as a business location and is building a new production site in Bellach, which will increase the capacity at the site by 60 %. The new building should be ready for occupancy in early summer 2021. Including the new building, FRAISA will invest around CHF 32 million over the next two years, CHF 20 million of which in Switzerland alone.

[9]

62 %¹

EQUITY RATIO

6.7 %¹

BANK FINANCING

8.6 %²

INVESTMENTS

+7.1 %⁴

**GROWTH IN
TURNOVER**

+5.7 %^{3 4}

**GROWTH IN
TURNOVER**

13 %²

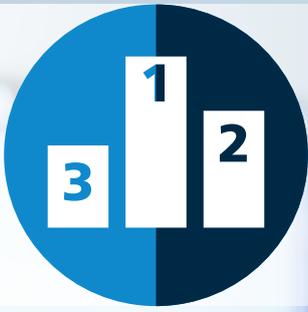
PROFIT

1 Of the balance sheet total under Swiss GAAP FER.

2 Of the turnover under Swiss GAAP FER.

3 Adjusted for exchange rate fluctuations.

4 Compared to the previous year.



FRAISA AT THE CUSTOMER
**EXTENT OF THE PRODUCT RANGE,
QUALITY, DELIVERY LOGISTICS**

[10]

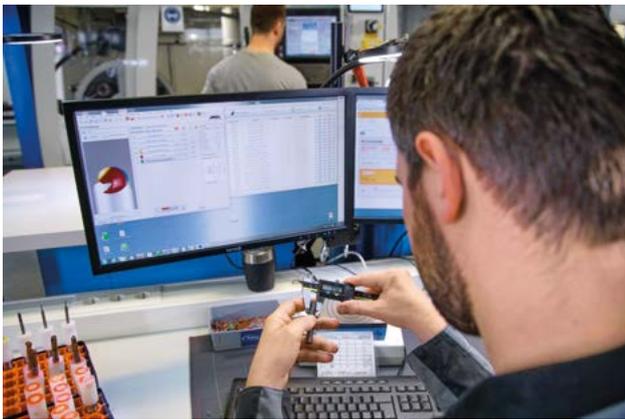


"The quality simply has to be right.
And that is the case at FRAISA."

Yannick Thonig | Production Technology Manager
Römheld GmbH Friedrichshütte, Germany

Extent of the product range, quality, delivery logistics

With our services, ROEMHELD achieves the highest quality levels.



Our Customer

The **ROEMHELD Group** is one of the market leaders for productive solutions in industrial clamping technology. The highly respected family business with many years of application experience offers one of the broadest product ranges in the field of clamping technology for production engineering worldwide. It is therefore no wonder that here you know exactly what really matters in times of Industry 4.0.

What is important today: For optimum chipping results, more than just a high-quality machine, tool equipment and a tool holder are required – state-of-the-art, high-quality clamping technology is also extremely important. This is the key and the decisive last piece of the jigsaw for a manufacturing process that satisfies even the highest quality standards. As **ROEMHELD** manufactures its own components, the company is reliant on high technology also for its machine and tool equipment.

Our Solution

This is where FRAISA comes into play as an innovative and high-performance partner who, just like **ROEMHELD**, stands for high-tech – above all in the field of chipping. **ROEMHELD** appreciates the fact that FRAISA is constantly evolving and offers a broad product portfolio of the highest quality. Equally important for the company, however, are FRAISA's high level of flexibility and special know-how.

Because if a problem occurs at **ROEMHELD** today, there must be competent, personal support available tomorrow. And when a custom tool is required, it must be available within a short time. FRAISA makes all this possible – through high-quality tool production, reliable, fast delivery logistics and personal contact on site. When time is of the essence, tools are even delivered personally. This ensures smooth production processes and the development of new, joint ideas for solutions and improvements. It is not without reason that the two companies have been partners for a long time.

[11]





FRAISA AT THE CUSTOMER
FRAISA SERVICES

[12]



"FRAISA offers us extensive **services** from a single source: We save time and money in this way and increase our productivity and reliability. This is ideal for us."

Daniel Frey | Team Leader NC Programming/Tool Room
Ferrum AG, Switzerland

FRAISA services

With our management system and our services, Ferrum achieves the greatest possible levels of economic efficiency.



Our Customer

Ferrum AG brings together five different business units under one roof, whose products and services flow into a wide variety of economic sectors and serve as a basis for a large number of end products.

The company has around 500 employees, its own sites in Rapperswil and Schafisheim (Switzerland), Glendale, WI, and Havre de Grace, MD (USA), Mumbai (India) and Kunshan (China).

With innovative, sound technical solutions and excellent services, Ferrum has been providing outstanding performance for over 80 years – always at the cutting edge of technology. With professional interest in the specific problems of its customers and the "solutions for markets" coordinated with them, the company will continue to provide its partners with highly beneficial, sustainable and economical solutions. For this, **Ferrum** itself relies on strong partners with high-performance products and services.

Our Solution

Ferrum finds exactly these customer-oriented **services** at FRAISA, which also convince with their reliable and simple handling. The company uses several FRAISA services at the same time for highest productivity levels:

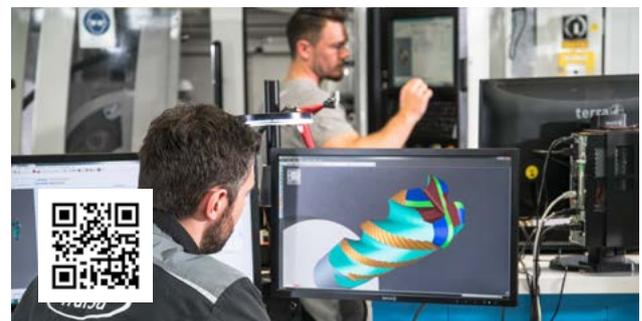
- The **ToolCare® 2.1** tool management system saves **Ferrum** time and costs. For example, the system shows whether in addition to a new tool, there is a reconditioned tool in stock.
- **Ferrum** also takes advantage of the powerful all-round service **FRAISA ReTool®** for the industrial reconditioning of its tools. These are then returned to the production processes without any problems – and without any time-consuming adaptation of the operating data.
- Tools that can no longer be reprocessed are finally recycled at **Ferrum** with the **FRAISA ReToolBlue** service in order to conserve resources.

[13]

Ferrum is entirely satisfied with the comprehensive FRAISA services from a single source. The company makes use of them for maximum customer benefit and the greatest possible levels of economic efficiency.



ToolCare® 2.1 (tool management system)



ConceptTool (custom tools)



FRAISA ReTool® (industrial tool reconditioning)



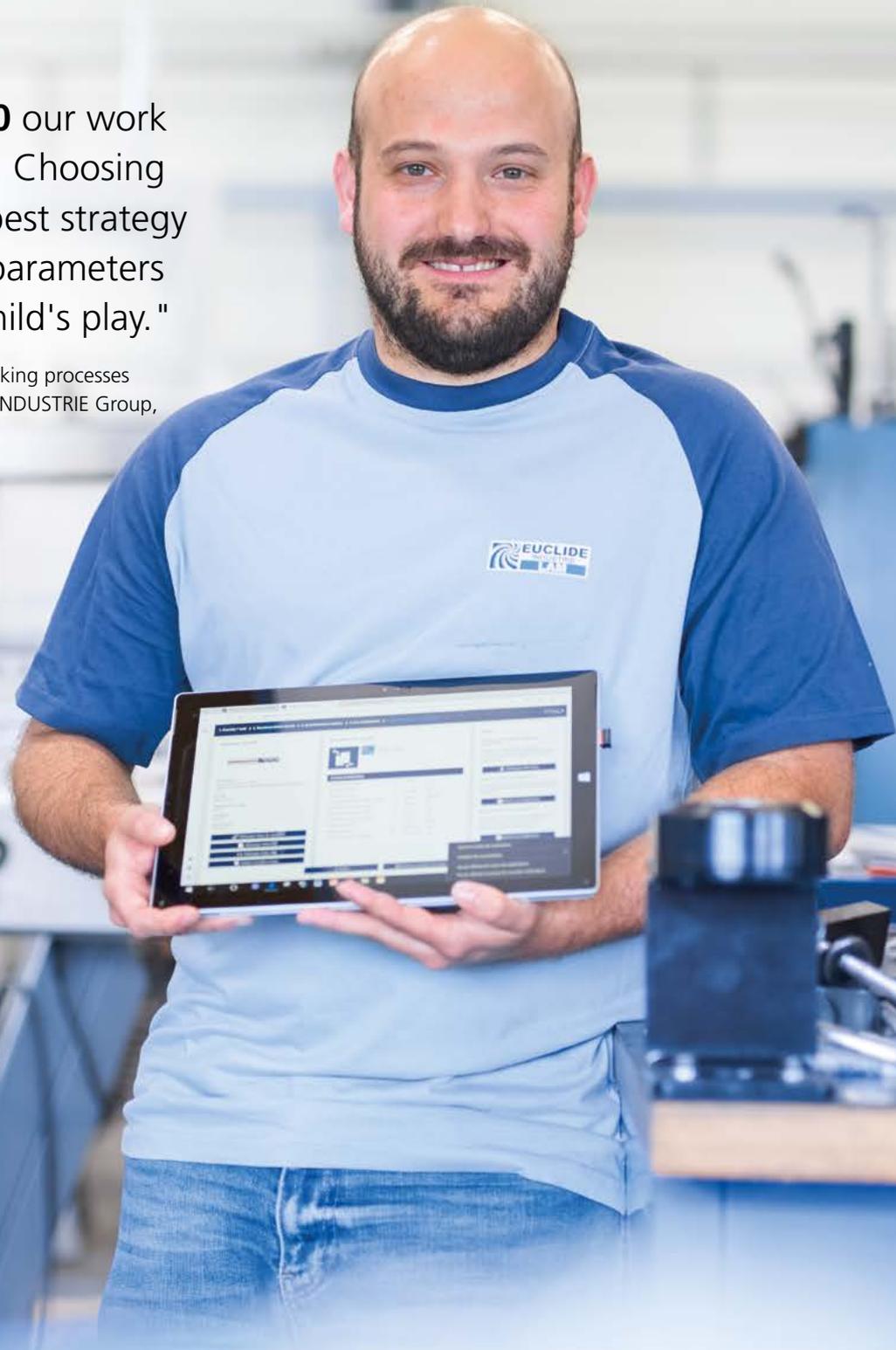
ToolSchool (customer training and education)



FRAISA AT THE CUSTOMER
FRAISA TOOLEXPERT 2.0

"With **ToolExpert 2.0** our work becomes much easier. Choosing the perfect tool, the best strategy and the best cutting parameters has almost become child's play."

Florent Dupuy | Responsible for working processes
LAM SAS, a company of the EUCLIDE INDUSTRIE Group,
France



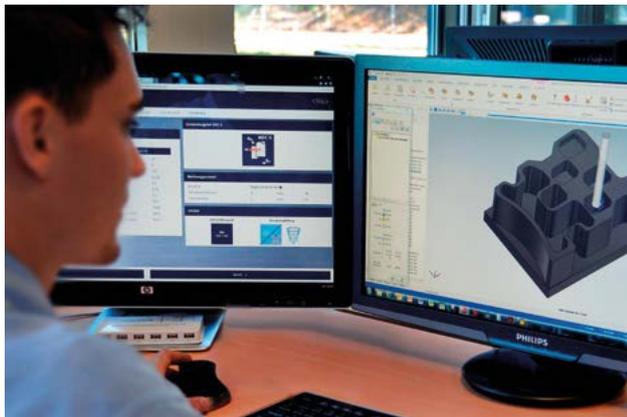
You can call up
ToolExpert 2.0
by scanning the
QR code.

FRAISA ToolExpert 2.0

With our online cutting data tool, LAM has significantly optimized its tool use.



© iStock / filipefranzo



Our Customer

LAM is one of five companies within the EUCLIDE INDUSTRIE Group that specializes in small and medium series prototypes. With teams formed from 230 highly qualified professionals, the companies quickly and flexibly serve a demanding clientele in the fields of capital goods, aerospace industry, machine tools, medical technology, energy and defense industry.

The company, which is based in Aix-sur-Vienne in France, has 62 employees. It relies on technical know-how and continuous investments in research and development. In order to meet customer requirements, **LAM** is also certified according to ISO 9001 and ISO 13485.

Florent Dupuy is the person responsible for working processes at **LAM**. He is convinced that a production company such as **LAM**, which is highly specialized and renowned for its quality and know-how in extremely demanding markets, must always be at the forefront of new technologies and services.

Our Solution

LAM has been using the online cutting data tool **FRAISA ToolExpert** regularly since 2013 to optimize its own tool use. Users appreciate the fact that online use is very easy and user-friendly and ToolExpert reliably provides all of the information for machine setters with just a few clicks.

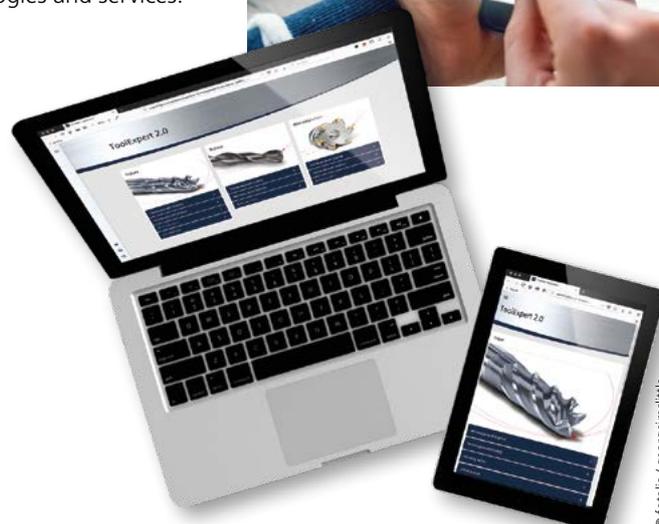
The company uses the online tool to define specific or universal standard tools for its applications. The exceptionally rich material database enables the precise and unambiguous definition of the cutting parameters, which are then taken over directly into LAM's NC and CAD/CAM software.

The result of this was that **LAM** - thanks to **ToolExpert** - was able to significantly reduce the consumption of chipping tools for all machining tasks and save an average of 50% of the time required for machining cycles in the last few years. With **ToolExpert 2.0**, **LAM** is also able to cope with all new machining strategies, such as HDC, HPC, HFC and plunge milling.

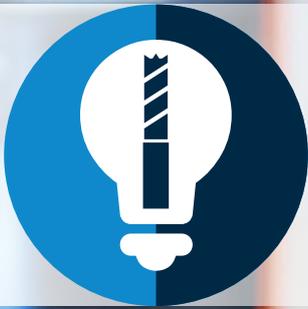
[15]



© fotolia / jag_cz



© fotolia / georgimilitie



FRAISA AT THE CUSTOMER
FRAISA TOOLSCHOOL



[16]

"The skills of the **FRAISA ToolSchool** increase the productivity of our company."

Matteo Saracchi | Operation Manager
Saracchi srl, Italy



You can watch the FRAISA ToolSchool video by scanning the QR code.

FRAISA ToolSchool

The knowledge of our training center makes Saracchi better than the competition.



Our Customer

Saracchi srl is an experienced mechanical engineering company from Italy which has been a specialist in numerically controlled milling and turning operations and mechanical fine machining since 1980 with its own machine park, assembly area and a technical programming office.

Today, 15 qualified and specialized skilled workers are employed at the company's headquarters near Milan, who repeatedly complete new special orders from individual to series production. Innovation has been a top priority at the company since it was founded.

In order to make direct progress on the way to Industry 4.0 and repeatedly question and optimize its own processes, **Saracchi srl** also relies on high-performance partners and external specialist support. For this purpose, Operation Manager Matteo Saracchi, is constantly on the lookout for information that will help the company to improve. This starts with planning and organization, followed by management and coordination of the production and application technologies.

Our Solution

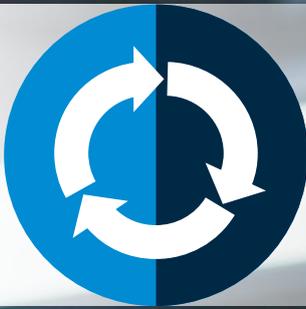
Saracchi uses the **FRAISA ToolSchool** training center to exchange ideas with specialists who speak the same language. In workshops, the employees can access the entire extensive know-how of the FRAISA specialists in order to specifically expand their own skills.

The company appreciates the friendly and open atmosphere of the **ToolSchool** and the perfect combination of theory and practice. On site the employees regularly acquaint themselves with the latest technologies, strategies and current market trends. Through creative suggestions they arrive at innovative solutions and already there develop ideas and concepts on how these can be implemented in the company.

Not only tools and their optimization are addressed, but also the entire manufacturing process and the machine infrastructure. This means that **Saracchi** has long realized that the machine environment and work organization are also decisive for the optimum use of the potential of FRAISA tools.

[17]





FRAISA AT THE CUSTOMER
FRAISA ReTool®

" **FRAISA ReTool®** enables us to manufacture in an environmentally friendly way while saving costs. "

Andreas Bruch | Milling Team Leader
Jankowski GmbH & Co. KG, Germany

[18]



You can watch the video on the FRAISA ReTool® by scanning the QR code.

FRAISA ReTool®

pays off for Jankowski.

Cost-saving and environmentally friendly.



Our Customer

Jankowski GmbH & Co. KG is a specialist in the field of chipping technology that has been designing the necessary processes for manufacturing high-precision components for machine and plant construction for 47 years in close cooperation with approximately 55 employees, along with the company management. The medium-sized company focuses on precision and process optimization in order to be able to supply everything that the mechanical and plant engineering industry requires from a single source. This takes place in close contact not only with customers and suppliers, but also with the company's own employees and colleagues.

The quality requirements for components are increasing all the time, with the speeds of the systems increasing and the required precision of the components also increasing accordingly.

In order to meet these requirements, the company must also always be in direct contact with the customer, must review the necessary requirements on site and provide a consulting service. On this basis, a joint product can then be developed and also produced which not only convinces through its quality, but also in terms of cost.

In addition to the increasing quality requirements, the topic of sustainability is also becoming increasingly important for **Jankowski**.

Our Solution

Thanks to the all-round service provided by **FRAISA ReTool®** **Jankowski** is placed in a position to manufacture and operate in an environmentally friendly manner while at the same time saving costs. Important factors in terms of business management and society as a whole.

Instead of replacing a used tool with a new one and thereby initiating the entire new production process, **Jankowski** sends the used tool which has become blunt to FRAISA to have it reconditioned there in a resource-saving manner.

This saves valuable resources and has a positive cost effect: About 20 % of the costs can be saved by **FRAISA ReTool®**.

Within a few days FRAISA then returns the reconditioned tool. It is particularly important to **Jankowski** that the same cutting values can be achieved and used with the reconditioned tool as are possible with an original new tool. And this is the case with **FRAISA ReTool®**. Because of this high level of reliability, the company has put its faith in the skills of FRAISA for more than 11 years.

[19]





© iStock / filipfrano

FRAISA ConcepTool

HAFNER optimizes its productivity with our made-to-measure custom tools.



Our Customer

HAFNER Pneumatika Kft. was founded in 1991 by Erik Hafner and his Hungarian partners. Before starting production in Hungary, he worked in Germany for about 30 years on the development and production of pneumatic valves. He built up the production in Hungary on the basis of his knowledge, experience and the skills of the Hungarian employees. The **HAFNER** brand stood for "German quality, Hungarian product" in the industry even at that time.

Thanks to their continuous development, **HAFNER** products are available today in more than 40 countries. In 1998 the company started its production at the current location in Halászi, where today almost 100 employees work. The core business of **HAFNER** is the development, production and trade in pneumatic elements and systems. **HAFNER** is a reliable partner to companies in the pneumatics and industrial automation industry all over the world.

Our Solution

HAFNER uses not only the most common milling tools, but also numerous tailor-made tools thanks to **FRAISA ConcepTool**. The close and continuous cooperation with FRAISA has existed since 2009. **HAFNER** places its trust in the high level of skills and flexibility and sees FRAISA as its main partner for developments in milling technology. The FRAISA experts are available at all times and with the proposed tools make a considerable contribution to the optimization of productivity at **HAFNER**.

The individual, made-to-measure custom tools are just one of many reasons for **HAFNER** to strive to continue its long-term cooperation with FRAISA. **HAFNER** is also convinced by the customer orientation, top quality and flexible logistical background, as well as reliable application technology information, the tool grinding options and professional training options that are available. This harbors great potential for successful development on both sides.

"With its milling tools, FRAISA is a reliable partner for us in the economical and productive manufacturing of our products."

Tamás Burján | Design Manager
HAFNER Pneumatika Kft., Hungary



You can watch the video on the FRAISA ConcepTool by scanning the QR code.



FRAISA projects

With us as a partner, Pilatus finds precise solutions even for complicated projects.



© iStock / filipefrazao

Our Customer

Founded in 1939, **Pilatus Flugzeugwerke AG** is the only Swiss company that develops, builds and sells aircraft on all continents: from the legendary Pilatus Porter PC-6, through the PC-12, the best-selling single-engine turboprop aircraft in its class, to the PC-21, the training system of the future. The newest aircraft is the PC-24 – the world's first business jet that can operate on short natural runways.

With over 2,000 employees, the company, which has its headquarters in Stans, is one of the largest employers in Central Switzerland. 130 apprentices are trained in 13 different apprenticeship professions. **Pilatus** is certified according to ISO 14001, which is proof that sustainability and environmental awareness have a high priority.

Pilatus constantly strives for optimizations in the complex production of aluminum structural components. The project focus is on the time- and cost-intensive finishing strategy for the wall finishing of aluminum components. The thin-walled and high aluminum web must be manufactured cleanly.

Our Solution

Pilatus works closely together with FRAISA in order to satisfy even the highest requirements placed on a project. In this specific case the machining tools had to provide extremely good ease of cutting with vibration-damping properties.

In intensive, joint **project work with FRAISA**, high-tech tools, a CAM strategy and the appropriate application data were developed and successfully tested in the production of **Pilatus**. The newly produced tools can now be used over their full cutting edge length for fine finishing.

In this way, the quality requirements of the component and also the reproduction of the components can be guaranteed with a high level of operational safety. The quality and efficiency levels that are achieved ensure the best performance and cover the customer requirements of **Pilatus Flugzeugwerke AG** to the maximum extent.

"No matter how complicated a project is, FRAISA has always found a solution with us in order to be able to implement even very special projects."

Martin Schmidli | NC Programmer
Pilatus Flugzeugwerke AG, Switzerland

[21]





© iStock / filipefrazao

FRAISA customer service & roadshows

With our support, HALGAND is successfully en route towards Industry 4.0.



Our Customer

HALGAND was founded in 1974 and has its headquarters in the French town of Saint-Brevin-les-Pins – one of the strongholds of the aerospace industry at the mouth of the River Loire on the Atlantic Ocean. With 280 employees, **HALGAND** operates in the field of machine processing, tank construction and assembly for the aerospace, medical and railroad industries.

The modern and extensive machine park comprises around 50 machining centers in order to meet the ever-increasing demands of customers. **HALGAND** is known for its know-how and the quality of its products. The company supplies small to large quantities of small to very large workpieces of over 10 meters in size – and this for all of the materials used in the aerospace industry.

In order to remain competitive, **HALGAND** uses all of the new technologies of Industry 4.0. For this purpose, the company uses the customer service of the preferred suppliers so that it can always fall back on the latest technological developments.

Our Solution

One of our technical consultants at FRAISA is in close contact with **HALGAND**. He helps with every step in the creation of a workpiece: starting with the planning of the prototypes, through the selection of the machining strategies and simulations, to the test runs in the machine. He also supports the integration of the tools into ToolCare® 2.1 and the tool reconditioning system FRAISA ReTool®.

FRAISA has thus established itself as the main supplier of chipping tools for **HALGAND** – thanks to the technical know-how, availability, mutual trust and good cooperation with the **FRAISA customer service**, which is considered to be a genuine, proactive and efficient partnership.

HALGAND also uses **FRAISA roadshows** to learn about new machining strategies. For example, the roadshow with the topics of dynamic machining and simultaneous 5-axis machining showed the company the enormous time savings that are possible when finishing is carried out with the new ArCut X milling cutters.

[22]

"The customer service of FRAISA is exemplary: regular exchanges based on a friendly relationship that goes far beyond a normal relationship between customer and supplier."

Erwan Cadio | Responsible for processing HALGAND, France





FRAISA ToolCare®

With our tool management system, A-1 Engineering optimized its tools.



© panthermedia.net / shilky

Our Customer

The US-American company **A-1 Engineering** provides job order production specializing in CNC milling and turning, surface, internal and external grinding as well as mechanical plain turning. The range of products is geared at industries such as plastic injection molding, medicine and aerospace.

A-1 Engineering was founded in 1971, and specialized initially in the design and construction of plastic injection molds. With innovative designs as well as high-quality manufacturing and engineering services, **A-1** earned itself an outstanding industry-wide reputation. In the process, the focus was placed increasingly on work concerning job order production and the manufacturing of small batches.

Today, the family business, **A-1**, is managed by Dennis Richner and his son Blake. Here, the following applies: **A-1** always provides high-quality parts and services, in no way inferior to the ones supplied by the founders, and thus ensures that the company maintains a powerful position in a varied business life.

Our Solution

A-1 Engineering focuses on the FRAISA tool management system, **ToolCare® 2.1**. The company benefits from no longer having to store the entire stock of tools in its warehouse, but still being able to access all parts required safely. Thus, **A-1** is able to save tool and wage costs on an ongoing basis.

With **ToolCare®**, reorganizing the tools of the company and always keeping the workshop neat and tidy is now possible. In addition, **A-1** is now able to use the system for tracking which tools were used for certain tasks, and always able to access tools for special needs and emergencies.

For ten years now, **A-1 Engineering** is a FRAISA customer. During this time, the company has appreciated FRAISA's outstanding high-performance tools, which always work at low-cost, and constant quality. They also benefit from the prompt technical on-site support and friendly staff.

"Even for smaller companies, the ToolCare® system is affordable and provides significant organizational advantages."

[23]

Blake Richner | CEO
A1-Engineering, USA



Scan the QR code to watch the video on FRAISA ToolCare®.



FRAISA AT THE CUSTOMER
FRAISA CHINA

[24]

"The cooperation with FRAISA in China opens a new chapter for both partners. Together we will help our customers to achieve greater success. It's great to work with a partner like FRAISA."

Johnson Chen | Head of Market Region China
GF Machining Solutions



FRAISA China

By developing its local business in China, GF Machining Solutions can now deliver services that meet the needs of our customers with even greater precision.



Our customers

GF comprises three divisions: **GF Piping Systems**, **GF Casting Solutions**, and **GF Machining Solutions**. Founded in 1802, the Corporation is headquartered in Switzerland and is present in 33 countries with 140 companies. Its 15,027 employees generated sales of CHF 4,572 million in 2018.

GF Machining Solutions is one of the world's leading providers of complete solutions to the tool and mold making industry and to manufacturers of precision components. The portfolio includes milling, wire-cutting and die-sinking EDM machines. Moreover, the division offers spindles, laser texturing, additive manufacturing, tooling and automation as well as digitalization solutions and customer services. The key customer segments are the aerospace, ICT, medical and automotive industries.

GF Machining Solutions is present in more than 50 countries with its own sales companies. In addition, the division operates production facilities and research and development centers in Switzerland, the USA, Sweden and China.

Our solutions

GF Machining Solutions and FRAISA have been partners for more than 20 years. Our cooperation in China started in the year 2000. In order to improve the local technical support, FRAISA set up a representative office in China in 2011. On this basis, FRAISA has established its local business partnership and enjoyed smooth cooperation and development. The first "joint tool specialist" was hired in 2015.

In 2018, FRAISA decided to set up a wholly-owned sales subsidiary at Waigaoqiao to replace the original representative office. Based on its optimized productivity and supply capability, it then expanded the organization structure and function-oriented support services, as a result of which the cooperation between the two companies has become even closer.

These are the best prerequisites for satisfying our customers in China and helping them to achieve success – they demonstrate their positive vitality in the sector even though they are facing great challenges today.

[25]



Network of the FRAISA Group

Services provided by the local branches.

Each one of our companies has very specific skills and they cooperate with one another in a network. This is how we make the sum total of all our skills available to our customers all over the world. In this way we maximize the range of services for our partners and minimize the effort required for their creation.

FRAISA SA in Switzerland stands for product and technology development, highly automated production and – with the FRAISA ToolSchool – the transfer of such expertise to our customers.

FRAISA Germany provides the environmentally-valuable FRAISA ReTool® tool reconditioning system for all European companies.

FRAISA Hungary, on the other hand, produces high-performance tools on particularly favorable terms at its ultra-modern plant.

At our company in the USA, our employees produce tools with dimensions specified in inches and offer tool reconditioning for our customers in the US market.

Last year we were able to include a new sales company, FRAISA China in Shanghai, in our network. We are looking forward to our future cooperation with customers in the Chinese market.

Our sales companies and sales departments ensure that our know-how is incorporated in an ideal way into our customers' value creation process.

At the same time they are also the bridge-builders between the needs of our customers and our technology departments.



[26]



1 FRAISA SA (headquarters) CH – Bellach

Principles:

- Product and technology development

Production:

- of milling, threading and drilling tools

Service and advice:

- Technical advice
- ToolSchool Training Center
- ToolCare®

Sales:

- Central logistics
- Sales in Switzerland, Europe, Asia and South America

2 FRAISA GmbH DE – Willich

Principles:

- Technology development

Production:

- Industrial tool reconditioning FRAISA ReTool®

Service and advice:

- Technical advice
- ToolCare®

Sales:

- Sales in Germany

3 FRAISA Hungária Kft. HU – Sárospatak

Production:

- of milling and drilling tools
- HSS unmachined parts

Service and advice:

- Technical advice
- ToolCare®

Sales:

- Sales in Hungary

4 FRAISA Italia s.r.l. IT – Milan

Service and advice:

- Technical advice
- ToolCare®

Sales:

- Sales in Italy



© panthermedia.net / RoboLab



5 FRAISA USA, Inc.
US – New Brighton

Production:

- of milling tools
- Industrial tool reconditioning FRAISA ReTool® (North America)

Service and advice:

- Technical advice
- ToolCare®

Sales:

- Central logistics (North America)
- Sales in USA, Canada and Mexico

6 FRAISA Sarl.
FR – Décines

Service and advice:

- Technical advice
- ToolCare®

Sales:

- Sales in France, Belgium, Luxembourg, Spain and Portugal

7 FRAISA (Shanghai) Co., Ltd
CN – Shanghai

Service and advice:

- Technical advice

Sales:

- Central logistics China
- Sales in China



**SUSTAINABLE
DEVELOPMENT**





Values

Essential fundamentals that shape our corporate image.



When Hans Stüdeli handed the business over to members of a younger generation in 1995, after 41 years of formative and passionate work, they identified the key values of FRAISA together with the workforce and embedded them in its mission statement. And these key values continue to apply unchanged:

- **Quality and technological advancement** for the product and in production.
- **Collegial communication** and high personal responsibility.
- **Cooperation** with all partners for mutual benefit.
- **Environmentally friendly products** in ecologically compatible processes.
- **Fairness** in everything we do.
- **Preservation of autonomy** as an owner-run company.

Furthermore, the Supervisory Board and Management Board are committed to the ideas and work of the Global Ethic Foundation (www.weltethos.de).

For us, the most important principles of the global economic ethic are:

- The dignity of all people is inviolable.
- Sustainable business management never only serves one's own interests.
- The golden rule of reciprocity: Do unto others as you would have them do unto you. It stands for reciprocal responsibility, solidarity, fairness and tolerance.
- Occupational safety, product safety and safety of products are fundamental requirements.
- Responsibility, integrity, transparency and fairness are fundamental values of economic activities which are characterized by compliance and integrity.
- Corruption is unacceptable.
- Truthfulness, honesty and reliability are values without which sustainable economic relations, which safeguard human welfare, cannot thrive.
- The discrimination of people because of their sex, race, nationality or religion is unacceptable. Inhuman actions or dealings contrary to the principles of human rights will not be tolerated.

[29]

EXPENDITURE
for the support of **social** and **cultural activities**

407,581 CHF

VOLUNTARY WORK¹

2,462 h

¹ Voluntary work by the members of the Executive Board and authorized signatories of all companies in societies, associations, political parties and other non-profit organizations.



Innovations

Successful results of ideas that have been thought through.



Ideas have to be promoted if innovations are to be created. FRAISA has developed a clearly structured product roadmap process for this purpose. Ideas from customers and employees are collected, sorted and evaluated in a multi-stage process. This gives rise to a clear overview of the current and planned technology and product development projects that can thus be precisely coordinated with one another. The result is a wide range of innovations that can be incorporated into existing products or lead to completely new types of products. There are many examples of these at FRAISA:

Milling tools

The new MicroHX milling cutters achieve a far superior tool life when machining very hard materials (HRC > 60). A groundbreaking development was to position the cutting edge contact point behind the cutting edge. Additionally, a mechanism for which a patent has been applied for ensures the controlled shearing of the outermost cutting edge radius in the range of the layer thickness. The new milling cutters can now be used up to three times longer than conventionally coated tools thanks to a very stable and sharp cutting edge and a higher thermal load capacity.

Threading tools

Highly interesting process innovations have also been developed to series maturity in the field of threading technology. Today, threading tools for through holes can be produced autonomously in different diameters on 5-axis grinding machines. The automatic changing of the grinding wheel packages and the tool holders was a prerequisite for this. This highly flexible production method not only enables smaller batch sizes to be ground more flexibly, but also opens up completely new horizons with regard to the geometric design of the screw taps.

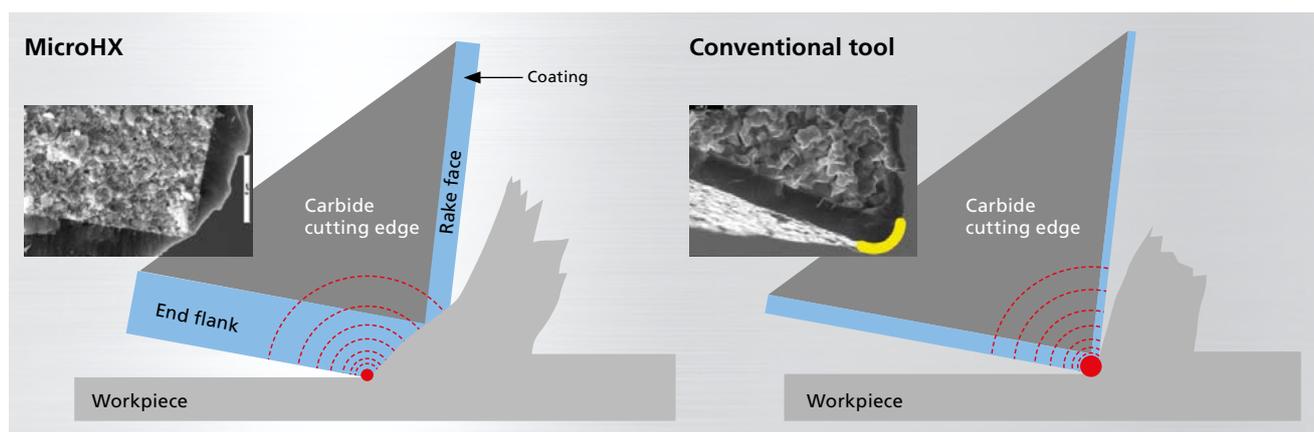
Process optimization

In addition to specific product innovations, the focus is also on innovations throughout the entire process. For this purpose, FRAISA works together with leading CAM manufacturers in order to develop machining strategies that are perfectly designed for the tools. Countless application parameters are created at the FRAISA test centers to offer customers a perfect synthesis of tool, CAM strategy and cutting parameters. The "Feature-Based Milling Systems" are used to develop highly innovative milling strategies that will significantly simplify and automate the CAM programming in the future.

Innovation network

The future challenges will far exceed the area of hardware and require system solutions. FRAISA is therefore embedded in a close-meshed network with universities and industrial partners in order to be able to actively design and shape the future.

[30]





Products

Advanced programs for high-precision coordination.



In the 2018/19 financial year, we focused on expanding our milling program for mold and die construction. With the MicroX miller program, FRAISA has created a very powerful tool portfolio that sets new standards with respect to performance, completeness and simple and fast tool selection, thereby opening up new options for the finish and superfinish machining processes in steels from 40 to 60 HRC.

MicroX

In the "High-performance milling tools 2019" catalog the MicroX miller program has been expanded with 108 new dimensions for steel machining. On the basis of this expansion stage, around 500 positions can now be offered which

enable very precise adjustment of the tool geometry with regard to tool length and diameter to the machining application and therefore considerably increase the customer benefit.

MicroHX

At the same time, a completely new MicroHX series concept was developed especially for the machining of high-strength steels. It comprises 56 articles and convinces with a performance level that is unequalled by the market competitors. A patent-pending microdesign of the cutting edge enables significantly better heat dissipation in the tool and less heat generation. This extends the service life by a factor of up to 3. We are convinced that FRAISA will set new performance standards in the market with these tools.

MicrospheroXG and MicrotoroXG

The tool portfolio for graphite chip removal has also been significantly expanded with 94 additional products based on MicrospheroXG and MicrotoroXG. Thanks to new length and diameter variants, the range of applications has been greatly expanded. This offers our customers a very cleanly coordinated milling program with over 200 items for a wide range of applications.

[31]





© thinkstock / paolob81

Health and Occupational Safety

Many offers for a good work-life balance.



[32]

The prerequisites for an overall feeling of well-being in the workplace are personal health, an interesting workplace, appreciation, teamwork and trust in the employer. FRAISA attempts to continuously optimize all of these areas. We receive the relevant inputs for this from the suggestion system and from regular employee surveys.

A publication in the renowned Swiss magazines "Bilanz" and "Le Temps" showed us that we are on the right track with this. The magazines listed FRAISA SA as one of the best employers. We were of course very pleased with this, especially as we were not informed that such a study was being conducted. The basis for this award was research carried out in online portals and employee surveys. Statista and Kununu were responsible for the study.

Comprehensive – and in many cases state-regulated – procedures, institutions and regulations have been established in all countries for the purposes of occupational safety. These processes and measures have a very good effect and, fortunately, FRAISA has not had any significant occupational accidents in recent years. In order to ensure that this remains the

case, FRAISA SA recently joined the Safety Charter and has defined a safety mission statement with 15 essential rules in the factory.

In the case of unplanned working hours lost due to illness or accident, occupational accidents account for the smallest share at 3%. The largest share is still the result of illness (90%), followed by non-occupational accidents (7%).

The striking aspect of the cases of illness is the fact that the number of hours lost due to long-term absences has risen steadily over the last few years. Psychological problems are often the cause of the illness. A phenomenon that is not only noticeable at FRAISA, but in the whole of industry. The rapid changes in the professional world are pushing many employees to their limits. Employers are required to take a careful approach to the development of their employees. FRAISA supports the employees in finding a good work-life balance through corresponding courses such as autogenous training, work organization or sporting activities such as "Bike to Work".





Resources

Displaying responsibility means conserving resources.



On August 1, 2018 the world had already consumed all of the natural resources for 2018 that could be regenerated in one year. As a manufacturing company, we are aware of our responsibility and would like to act as a role model in this respect.

FRAISA ReTool® – refurbishing instead of replacing

Our regrinding center, which is one of the largest fully automatic such centers in Europe, is located in Willich (Germany). Cross-brand shaft tools are reconditioned and coated here with the highest quality using our FRAISA ReTool® service. The lifecycles of the tools are significantly extended as a result and expensive raw materials saved.

FRAISA ReToolBlue – recycling instead of disposal

Tools that can no longer be reconditioned are collected by us via our ReToolBlueService and recycled. Because we consider it our duty to offer a completely closed raw material cycle.

FRAISA ToolExpert – Efficiency instead of wasting energy

With ToolExpert, we offer our customers cutting values that are perfectly matched to the tools and guarantee maximum levels of productivity. This enables our customers all over the world to reduce their machine running time and save many millions of kilowatt hours of electricity.

FRAISA – Quality instead of rejects

At FRAISA we ensure the highest quality, which can only be guaranteed with very stable manufacturing processes. Minimal rejection rates ensure that the tools go to the customers and that virtually no raw material or energy is destroyed in scrap parts.

[33]

CONSUMPTION OF RESOURCES

WATER¹

8.4 m³

CONSUMPTION OF RESOURCES

NATURAL GAS¹

2,562 kWh

CONSUMPTION OF RESOURCES

WOOD¹

1,991 kWh

CONSUMPTION OF RESOURCES

ELECTRICITY¹

23,897 kWh

CONSUMPTION OF RESOURCES

FUEL¹

570 l

¹ Consumption of resources per full-time equivalent and year (without travel to and from the workplace).



TRAINING



fraisas



Training

Encouraging the employees to maximize their chances of future success.



Internet of Things, Industry 4.0, digitalization, BigData etc. are catchwords that we encounter every day. They are changing our working environment and leading to new job profiles. Whereas 50 years ago an apprenticeship was sufficient for a whole working life, today this figure has already increased to 3 to 5 vocational trainings and in the future there will be considerably more. Learning and professional development is therefore an ongoing process which must not be neglected and which accompanies us until the end of our professional life.

FRAISA therefore attaches great importance to training and further education. This begins with a broad range of training places, as well as a great deal of support for in-service professional development.

Overall, FRAISA has invested almost CHF 1.5 million in training and further education in the 2018/19 financial year. Calculated on the basis of the individual employees, this corresponds to 3.4 further training days per year and a cost burden of almost CHF 3,000 per employee and year.

In order to ensure that the work-life balance can be maintained in spite of permanent further training, FRAISA applies the principle of further training time = working time.

In addition to the classic ToolSchool training for our technical employees, a modern e-learning platform has been in operation for two years. This can be used to deepen and test the knowledge, with the participants receiving an appropriate certificate upon successful completion. Currently there are more than 200 employees who have access to this platform. They can also exchange information in a special forum, where they have access to all relevant training material and YouTube videos.

[35]



EXPENDITURE

for **education** and **training**

1,474,244 CHF



CORPORATE GOVERNANCE BODIES



Corporate Governance Bodies



Board of Directors and Executive Board of FRAISA Holding AG

(from left to right)

Thomas Nägelin, Dr. Markus Schibli, Dr. Fritz Gantert, Josef Maushart, Prof. Dr. Peter Ruf, Charlotte Froelicher-Stüdeli, Hanspeter Kocher, Florian Maushart, Ursula Maushart, Dr. Dirk Kammermeier



Board of Directors and Executive Board of FRAISA SA

(from left to right)

Stefan Gutmann
Head of the Production Division

Josef Maushart
Chairman of the Board of Directors,
Chief Executive Officer

Charlotte Froelicher-Stüdeli
Member of the Board

Hanspeter Kocher
Head of Administration, Finance & IT

Dr. Markus Schibli
Member of the Board

Dr. Dirk Kammermeier
Head of the Product Development Division

Thomas Nägelin
Head of the Sales & Marketing Division



FRAISA Holding AG

Gurzelenstrasse 7
CH-4512 Bellach
Tel.: +41 (0)32 617 42 42
Fax: +41 (0)32 617 42 41
mail.ch@fraisa.com

FRAISA SA

Gurzelenstrasse 7
CH-4512 Bellach
Tel.: +41 (0)32 617 42 42
Fax: +41 (0)32 617 42 41
mail.ch@fraisa.com

Authorized signatories at FRAISA SA

Markus Baumann	Michael Hirschi
Patrick Brand	Jeannette Meier
Rolf Bücheli	Stefan Mollet
Thomas Frisch	Andreas Nold
Flavio Gugelmann	Dr. Johann Rechberger
Adrian Hangartner	Kurt Schaad
Adrian Hirschi	Tiziano Sichi

[37]

Corporate Governance Bodies



FRAISA GmbH

Hanns-Martin-Schleyer-Str. 15b
D-47877 Willich
Tel.: +49 (0)2154 489 84-0
Fax: +49 (0)2154 489 84-33
info@fraisa.de



FRAISA Sarl.

7, Rue de Lombardie
ZA Les Pivolles
F-69150 Décines
Tel.: +33 (0)4 721 45 700
Fax: +33 (0)4 723 73 490
fraisa@fraisa.fr

[38]



Executive Board

Dr. Thomas Wittig

Tel.: +49 (0)2154 489 84-0
thomas.wittig@fraisa.de

Prokuristen¹

Michael Ohlig

Head of Sales
Tel.: +49 (0)2154 489 84-100
michael.ohlig@fraisa.de

Mario Weyermanns

Head of Finance,
Human Resources, IT
Tel.: +49 (0)2154 489 84-18
mario.weyermanns@fraisa.de

Philip Disdorn

Head of Production
Tel.: +49 (0)2154 489 84-11
philip.disdorn@fraisa.de



Executive Board

Olivier Dumoulin

Tel.: +33 (0)4 72 14 57 00
olivier.dumoulin@fraisa.fr

Prokuristen¹

Frédéric Fournol

Head of Finance
Tel.: +33 (0)4 72 14 56 96
frederic.fournol@fraisa.fr

¹ Authorized representatives with signing power.



FRAISA Italia s.r.l.

Via Grosio 10/8
I-20151 Milano
Tel.: +39 02 33406 086
Fax: +39 02 334 06 055
info@fraisa.it



FRAISA Hungária Kft.

Vásárhelyi Pál u. 3
H-3950 Sárospatak
Tel.: +36 47 511 217
Fax: +36 47 511 215
mail.hu@fraisa.com,
info@fraisa.hu

[39]



Executive Board

Pasquale Aloise
Tel.: +39 33 58087 343
pasquale.aloise@fraisa.it

Prokuristen¹

Antonio Bignami
Head of Sales
Tel.: +39 33 55844 954
antonio.bignami@fraisa.it



Executive Board

György Varknal
Tel.: +36 47 511 256
gyoergy.varknal@fraisa.com

Prokuristen¹

János Ernst
Head of Finance
Tel.: +36 47 312 686 / 211
janos.ernst@fraisa.hu

László Jósvai
Head of Production
Tel.: +36 47 312 686 / 22
laszlo.josvai@fraisa.hu

Péter Kovács
Head of Sales
Tel.: +36 30 740 3922
peter.kovacs@fraisa.hu

Balázs Perecsényi
Head of AVOR
Tel.: +36 30 740 3941
balazs.perecsenyi@fraisa.hu

¹ Authorized representatives with signing power.

Corporate Governance Bodies



FRAISA USA, Inc.
711 5th Street SW, Suite 1
New Brighton, MN 55112
Tel.: +1 (651)636 8488
Fax: +1 (651)636 8588
info@fraisausa.com



FRAISA (Shanghai) Co., Ltd
A202, Building 3, No. 526, 3rd East Fute Road
Shanghai Pilot Free Trade Zone, Shanghai 200131, P.R.China
Tel.: +86 21 5820 5550
Fax: +86 21 5820 5255
infochina@fraisau.com

[40]



Executive Board

Mathieu Tapp
Tel.: +1 (651)636 8488
mathieu.tapp@fraisausa.com



Executive Board

Joe Liu
Tel.: +86 (0)21 5118 0821
joe.liu@fraisau.com

Prokuristen¹

Douglas Franke
Head of Production
Tel.: +1 (651)636 8488
douglas.franke@fraisausa.com

Paul Pregrocki
Head of Administration
Tel.: +1 (651)636 8488
paul.pregrocki@fraisausa.com

¹ Authorized representatives with signing power.



Here, you will be provided with further information on the FRAISA Group.

You can also use our ordering service via our E-Shop and benefit from our changing offers.

FRAISA Holding AG

Gurzelenstrasse 7 | CH-4512 Bellach |
Tel.: +41 (0)32 617 42 42 | Fax: +41 (0)32 617 42 41 |
mail.ch@fraisa.com | **fraisa.com** |

You can also find us at:
facebook.com/fraisagroup
youtube.com/fraisagroup

passion
for precision



7 613088 468339
HIB01806 EN