



FRAMOS

ENGINEERING IMAGING SOLUTIONS

FRAMOS company profile



www.framos.eu

ABOUT FRAMOS

FRAMOS



Dr. Andreas Franz, CEO FRAMOS

How do doctors recognise skin cancer early? With the aid of image processing. Who will help you in your old age? Robots that use image processing. How does my car recognise road signs? With image processing on board. How is my car manufactured without a single scratch on it? Image processing. How do computer games function without a joystick? Using image processing. How is there always the same number of salami slices on my frozen pizza? Because image processing works precisely.

Images have replaced words as the most important medium for information in both our private lives and in industry. This means that image processing has become one of the most important communication technologies of the early 21st century. Regardless of whether it's used for improving health, optimising manufacturing processes, guaranteeing flawless production, providing security or enabling you to have more fun. Many ideas can only be implemented using high-tech image processing.

But that's only the beginning. For us, image processing is not just a technical discipline, but a fascination, the future and our mission all at the same time. "Teaching machines to see" is what drives us. Our 30 years of experience add up to 30 years of participation in the evolution of a revolutionary new technology. The spirit of innovation and development of our early days has remained at the heart of our company.

It defines our three areas of business: Imaging Products, Engineering Support and Imaging Solutions. In the future, images will determine our world even more than today, whether in the private sphere, in business, research or communications. Their professional, reliable, highly precise and efficient processing will set new benchmarks.

As a complete product and service provider working with you from the product to the application, from development to support, from consultancy to global logistics, FRAMOS will also be enabling the imaging of tomorrow, defining trends on the market and serving you with the highest quality products and services. You can therefore focus on strengthening your competitive advantage – we'll take care of the rest and support you all the way.





"Image processing is like a good game of Scrabble. Once you have the right building blocks, you're almost guaranteed to win. Only in our case, it's not a matter of chance."

Dr. Roland Müller, Product Manager

Companies are successful if they are free to make independent decisions. This applies especially to partnerships with specialised suppliers and service providers. FRAMOS recognised this fact early on. Because it's not just about fulfilling needs, but also about keeping cost-effectiveness constantly in focus. A solution must fulfil business requirements while also being technically of the highest standards. This results in "freedom of choice" in the truest sense, because you should not have to adapt to what's available, but rather choose what suits you the best. Whether you're interested in image sensors or cameras, in sensor modules or GPS modules, or require optics, lighting, cables, frame grabbers, software or specialised equipment, you can choose from our comprehensive range of products for your specific application. You can rely on FRAMOS to provide you with the optimum solution. We are orientated towards your needs and place the utmost value on your freedom of choice and independence from manufacturers.

FRAMOS can also deliver complete systems made up of optimally combined components. As a customer, you therefore have the freedom to concentrate on developing your own systems, your customers and your competitive advantage. At the end of the day our highest priority is redefining the limits of what is possible in order to achieve the best quality and the highest return.

How does FRAMOS fulfil all these needs? How do we manage to have all of the necessary components available for all system requirements? Firstly, through our close and long-term partnerships with numerous highly regarded manufacturers. Secondly, through a market-driven, efficient, tried and tested range of different types of image sensors, cameras, optics, lighting, cables and frame grabber components. As well as that, we provide specialised components for each of these areas, for example HDR sensors, high resolution cameras, three-sensor lenses, LED line projectors, extremely flexible robotic cables and analogue GigE or Camera Link GigE converters.

What makes us really different however is that we don't just think in terms of individual parts, we think in terms of systems as a group of products functioning optimally together. This is supported by solid expertise and competence, not just empty promises. We don't just provide solutions but genuine passion for innovation. With 30 years of experience, we can contribute to your success and independence.



DEVELOPMENT SUPPORT

FRAMOS



Jens Kellermann, Development Manager

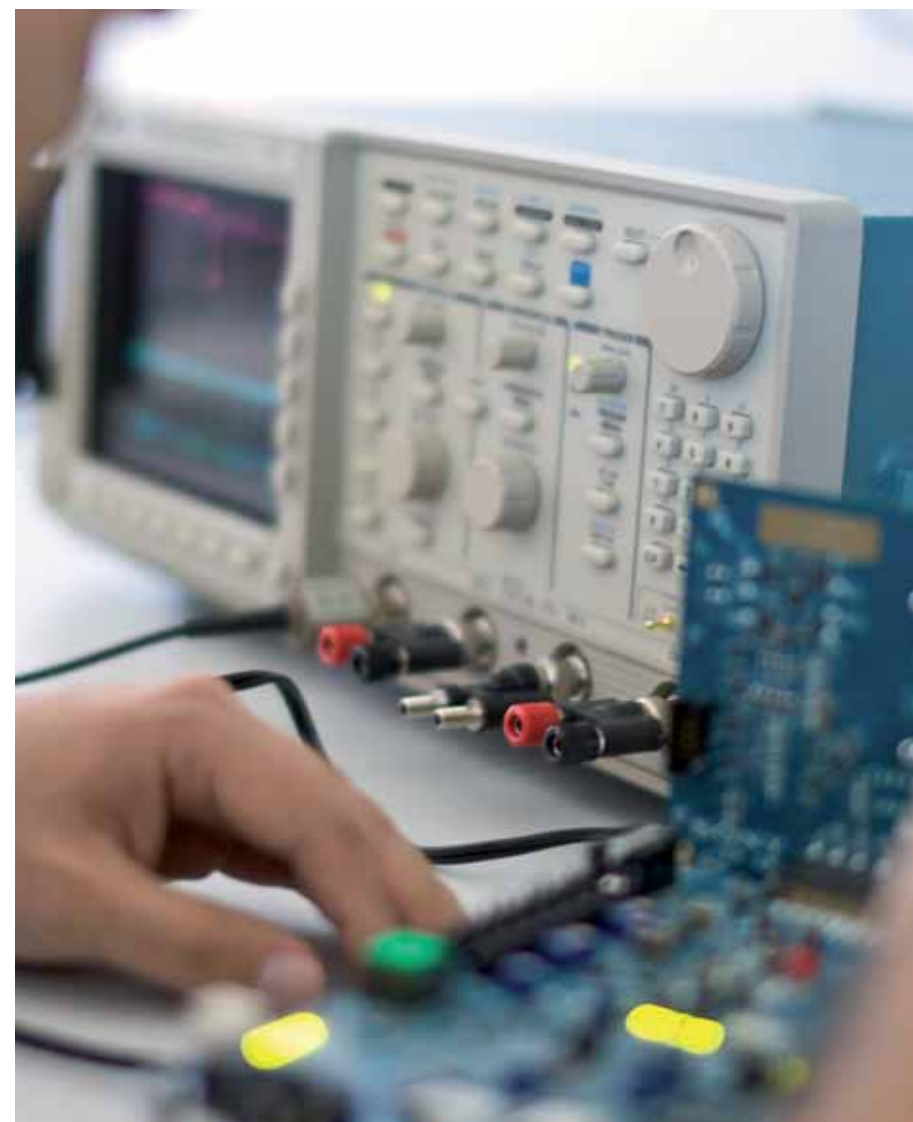
If you look at the production plant of a large automotive manufacturer today, you will notice something extraordinary: even if the plant manufactures millions of vehicles of the same model, the number of vehicles that are absolutely identical is surprisingly small. The reason for this is the high number of components that can be individualised, from seat covers to the engine and the colour of the car. Individuality is king.

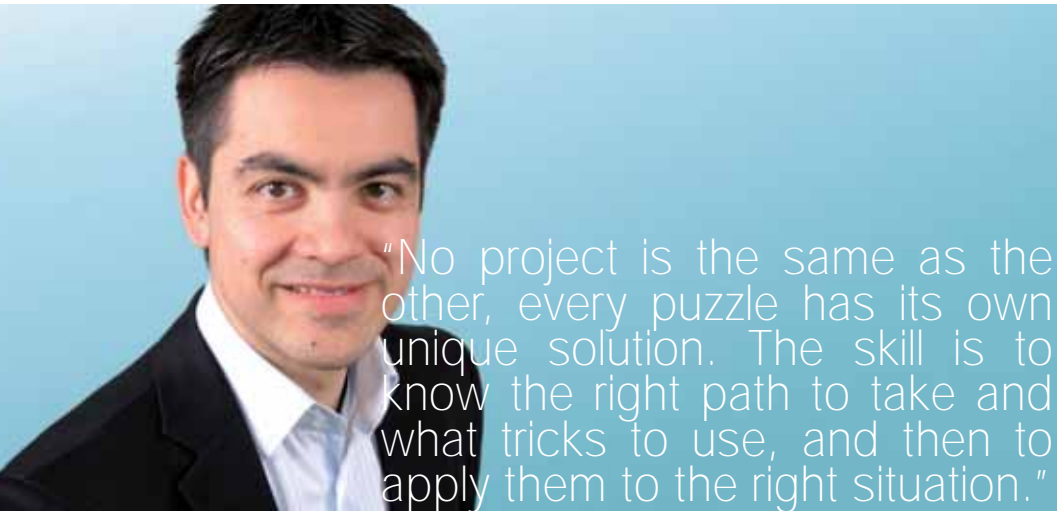
This kind of individualisation needs to be economical for the image processing market. The development department at FRAMOS provides the necessary foundation for this: from development support to the development platform and prototype development, from software and tools to algorithms and design. This is also defined by increasing requirements for the flexibility and scalability of image processing components. More and more customers are thinking about developing their own cameras, plans which are justified by the incredible progress being made in the area of CMOS sensors, especially because of the comparatively simpler design work required in contrast to CCD sensors.

FRAMOS provides ideal support in this area from the decision-making process right up to the finished product. The right price can be found for every application too. This is achieved using a wide range of hardware and software platforms, which enable us to start evaluating sensors and all necessary system components without layout work or prototype construction.

Which services do we provide in this area?

- We provide you with modular hardware and software platforms
- We develop the appropriate algorithms for you
- In order to aid you in the decision-making process, we support you in feasibility studies or carry these out for you
- We evaluate and optimise your existing products, designs and ideas
- In close cooperation with your specialists, we develop prototypes together where necessary
- We plan your series production in terms of cost and manufacturing optimisation





"No project is the same as the other, every puzzle has its own unique solution. The skill is to know the right path to take and what tricks to use, and then to apply them to the right situation."

Dr. Simon Che'Rose, Solutions Manager

Technology is one key factor in our sector. The other? People. Even perfect systems, ideal components and optimum devices will not work by themselves. Only human intervention, creative thinking and hard work will enable desired goals to be reached.

At FRAMOS we have implemented this idea in two ways. On the one hand by making communication between you and FRAMOS a top priority, above even technical considerations. In this way we ensure that we are aware of the entirety of your needs and requirements – and fulfil them in their entirety. You could call this a "complete solution from one source". But you could also simply say: at FRAMOS they don't just think about the machines, but about people too.

How do we do this? With our highly qualified team of image processing specialists. Their combined expertise and their ability to think outside the box results in tailored image processing solutions for a variety of different industry sectors, while they also apply interdisciplinary knowledge and a hands-on creative approach. This gives us strong competencies in the most important areas of application such as automation, quality assurance, medical technology, security technology and transport technology.

If you ask the team of solution-finders about its strengths, they will probably tell you about their high level of competence in three-dimensional component testing. With pride they will

mention detailed solutions support and tailored design on the basis of the requirements of our customers. You will learn about how much they enjoy working in partnership with customers to find the best solution not just for the system, but for the entire workflow. You can therefore rely on the objective selection of the right components independent of which manufacturer made them. This team will provide you with a comprehensive overview of the relevant market and access to the latest technologies.

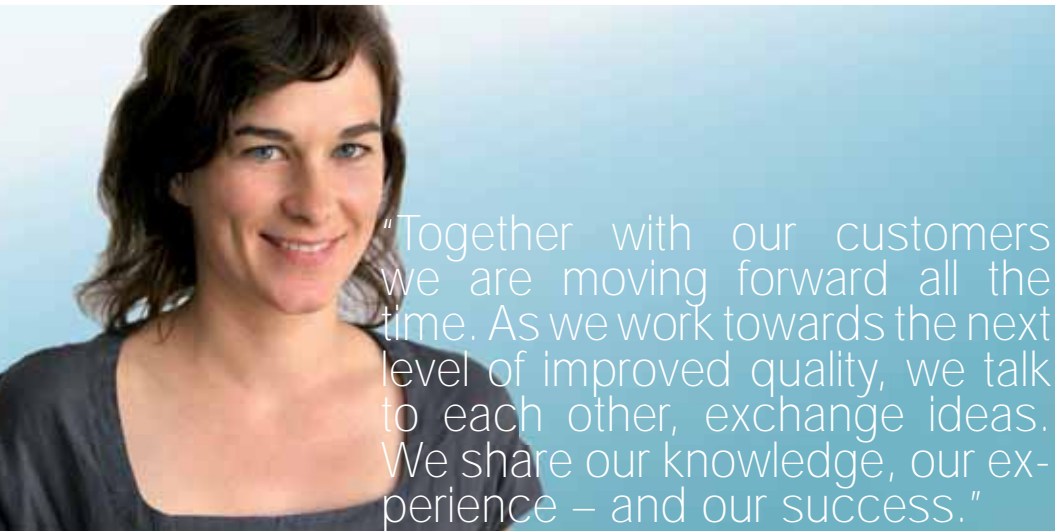
In short, our experience shows that even apparently simple tasks, such as choosing the correct lighting system, significantly influence the efficiency and therefore the cost-effectiveness of an image processing system. If you wish our team will also develop a finished system and programme the applications in the corresponding development and user environment. We cover the entire value chain from integration, operation start-up to maintenance later on. Or put simply, having desires is a human quality. The ability to fulfil these desires is another.



SUPPORT

Knowhow, service, trainings

FRAMOS



"Together with our customers we are moving forward all the time. As we work towards the next level of improved quality, we talk to each other, exchange ideas. We share our knowledge, our experience – and our success."

Helke Gabele, Support Manager

No image exists by itself. Every image exists in the context of other images and is a document of change. Images capture individual moments in our lives. And life is constantly subject to change. The same is true of image processing. It is constantly changing and adapting to the latest technological progress. It also changes in the context of every customer requirement and with every idea we come up with at FRAMOS.

Your guide in this constantly changing world is customer support. This too is not fixed and unchanging, but a flexible combination of services, defined by a wide spectrum of expertise. We provide holistic and personal customer support by providing technical support through the communication and explanation of product-specific, technical information from the manufacturer. We solve complex problems and can offer the comprehensive help of experts. We also possess detailed knowledge of applications acquired through many years of solid experience in image processing, which is strengthened through active contact with manufacturers and regular training courses. The instruments we use are as diverse as our customers: problem analysis, exchange of experience, helpdesk, knowledge transfer, technical research, knowledge databases, to name but a few.

We can also provide design In support. This ensures that you always get the right product for your system requirements and that you can

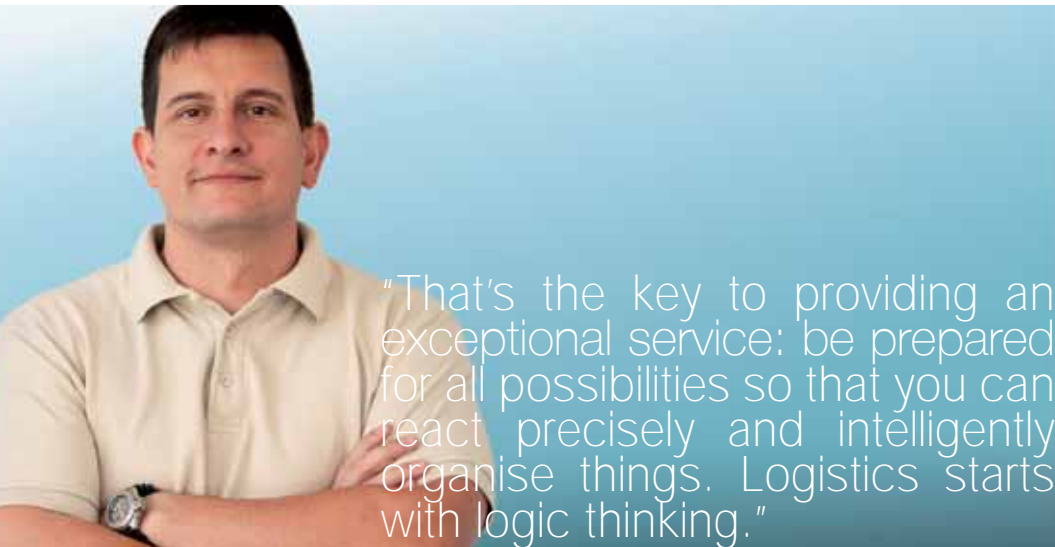
always depend on a broad product portfolio, which allows you to select the optimum combination of components so that you are always moving ahead towards new developments. This also involves a number of approaches: technical sales, new product presentations, applications meetings, technical competence, product and systems selection and especially efficient and economical technical consultancy in advance.

The third support system for you is quality assurance. Product development and improvements through customer feedback and internal product testing are especially valued at FRAMOS. This means that the quality of our product portfolio is constantly improving. With the creation of a comprehensive knowledge database, we have guaranteed the sustainability of our expertise. This includes previous solutions, important information and has a targeted product-specific search capability. Precisely because we place such importance on continuous feedback, detailed assessments of new products, targeted training courses, a vital knowledge database and meticulous device management, we are already laying the foundation today for a future that can be relied upon.



LOGISTICS & FULFILLMENT

FRAMOS



Peter Wagner, Logistics Manager

It's no surprise that logistics and logic sound similar. The ancient Greeks have passed on this clever concept: everything follows the appropriate path, everything moves in carefully considered directions. Nothing should be left up to chance. Logistics requires smart thinking. Logistics needs agile minds, but with two feet placed firmly on the ground.

The importance that FRAMOS places on such precision in image processing – and for which we are valued by our customers – is the same precision that is required to manage the workflow of processes in which products, designs and projects move between us and our customers so that the things that belong together, work efficiently together.

Processing orders at FRAMOS is not just a simple daily task. It is the logical result of a well-thought out, hands-on way of working. The foundation of this is our broad product portfolio and our expert knowledge. Real customer satisfaction can only be achieved with a

carefully planned sales and logistics service. In this way, customer loyalty is not understood as the attempt to bind the customer to us, but as a shared and enjoyable journey across a bridge of understanding. Whether we are creating the product portfolio or taking orders, concerned with direct customer support or precise delivery systems, providing meticulousness in route planning or reliability in payment management, our promise of the consistent quality of our services at the highest level is proven to our customers every day. This is just as much a measure of our success as the quality of the devices we deliver.

So where do our particular strengths lie? In efficiency and flexibility for example. This means that we plan early and can combine reliable workflows and creative freedom at the same time. That's why we run our own warehouse, which means we can react quickly in a crisis. This ensures that your production runs smoothly, while we look after the logistics. At the same time we protect your capital with just-in-time delivery. In short, we're always there when you need us. It's logical.



FRAMOS IN EUROPE

Contact to your partners at FRAMOS

FRAMOS

FRAMOS has its roots in Germany. Thanks to organic growth we are now a European company. Rather than thinking in terms of centralisation, we've developed into a well-networked organisation in which our various competencies, spread across different locations, influence and reinforce each other. Based on this Europe-wide team, we have established an integrated value chain, not just materially, but also in terms of knowledge. An extensive knowledge transfer ensures that we learn above all from our customers as well as from each other. The structure we have in place today is also the scaffolding we wish to build on. The future expansion of foreign subsidiaries and partner companies is our way of meeting the challenges of globalisation. It's already part of our business today.



Julian Parfitt UK · Emanuel Maridor FRANCE · Lorenzo Cassano ITALIA · Andreas Franz CEO



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"A team is more than just the sum total of all the players – the right combination of players as well as individual talent guarantee success in the international league!"

Lorenzo Cassano, General Manager Italy

30 YEARS OF FRAMOS

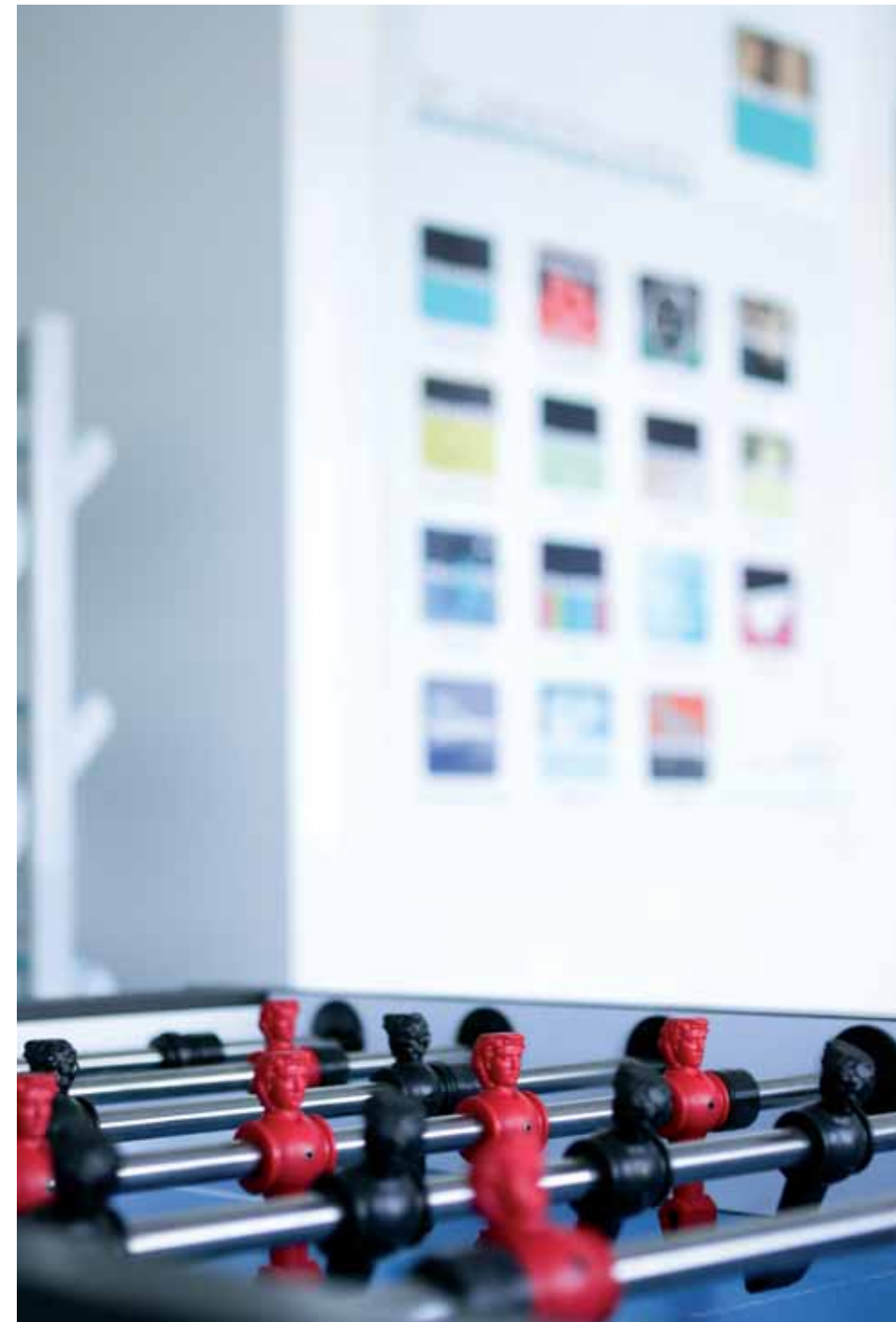
30 years of innovation



"When you start a family, you think about sustainability in the long term, the same way you do when you start a company. Both require all your strength, your total commitment as a person..."

...Starting a family company is a real challenge in this sense. But it is also a real joy to see, as 30 years of FRAMOS have shown, that other people are also willing to give their strength, their ideas and their talent to the company, making both them and the company pioneers in the business. Our history is completely and utterly defined by team spirit."

Bernd Franz, Founder FRAMOS



WHAT MATTERS TO US



Attitude



Passion



Change



Quality



Service Excellence



Family



Knowledge



Innovation



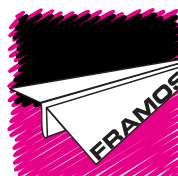
Pioneer



Fun



Integrity



Creativity



Endurance



Objectivity



Loyalty

Highly expressive images epitomise our entrepreneurial approach. Therefore, on our 30-year anniversary, we are once more setting the pace and focusing on the subject of "things that matter to us!" With this in mind, we have adapted our striking logo 15 times, to illustrate the foundations of our company's success.

These include passion, creativity and expertise, as well as loyalty, respect and fun. You can also recognise stamina as well as happiness, excellence in service and a pioneering spirit. Each person has something different that drives them; together these form the building blocks for working together successfully. For a family-run business like us, the people with whom and for whom we work are the most important factor. That is what differentiates us from the competition.

First-class technology is indeed convincing in itself, but its true value only unfolds when it is actually put to use by people. For us this means, for example, that we listen before we do anything else and don't impose our opinion on our customers. We therefore aim for long-term business relationships and respect the uniqueness of our customers, employees and suppliers.

find out more about the things
that matter to us at

www. Ramos.eu/30



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