



Guide to German

Medtech Companies



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Guide to German Medtech Companies

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Editorial

Medtech made in Germany

The medical technology sector is currently experiencing one of its most challenging times. While medtech constitutes a well-established pillar within the healthcare industry in Germany and provides a lot to the country's export-driven economic growth, the pandemic has changed business activities fundamentally in 2020 and will continue to do so in 2021. But thanks to the strong growth periods of recent years, German companies are nevertheless in a good position to pull through a period of turbulence and tough requirements – be it due to the corona pandemic or with regard to the regulatory situation. Seen from this perspective, the German medtech sector is still faring comparably well. For 2020, around 32 billion euros of revenue will be generated – less than 2019, but still more than in 2018. The robust condition of the sector owes to the very German-like combination of tradition and inventiveness, focus on quality and efficient engineering expertise, resulting in the continuous development of new products as well as a good hands-on mentality in dealing with an unprecedent crisis. Another of the sector's competences which helped to provide stable business activities is its ability to cross-link with the pharma, IT, and manufacturing sectors.

With the sixth edition of our "Guide to German Medtech Companies", BIOCOM AG follows this development, highlighting the broad competences of the German medical technology sector. The Guide offers a diverse compendium of companies – from medical device developers to manufacturers, service providers, medtech event organisers and organisations. In addition, the most recent trends in the German medtech sector are summarised in the introduction, for instance digitisation.

The Guide to German Medtech Companies is supported by our partners Germany Trade & Invest, BVMed e.V., Medical Valley EMN e.V., Life Science Nord, Medical Mountains, SPECTARIS, Forum MedTech Pharma, MicroTec Südwest, IVAM, and VDMA. These national organisations and regional networks are important stakeholders, helping to establish further growth of "medtech made in Germany" by providing the right environment for traditional family-owned firms, global players, start-ups, technological forerunners, manufacturers, suppliers, and service providers.

As this book will be distributed digitally and with the support of many international medtech stakeholders in Europe and overseas, it will definitely provide strong visibility of German medical technology companies on an international level. The publication is also available for free via our BIOCOM AG app. Electronic version or as printed copy: the Guide is bound to become a must-have on the desk of health professionals in Germany and beyond.



Sandra Wirsching Editor-in-Chief



Marco Fegers
Sales & Marketing



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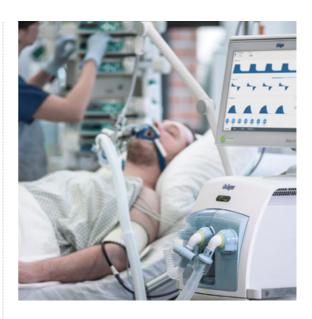
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The German Medtech Industry: Reliable partner during the pandemic and beyond

By combining long-standing competences in engineering, manufacturing and healthcare, German medical technology companies are pioneers in the development of new products and devices. They provide state-ofthe-art products, fulfilling high quality and safety standards in accordance with international regulations. Germany is also recognised as a proven manufacturing location, with suppliers guaranteeing high-quality medical devices. Most of the German enterprises are very much export-oriented, as most of the revenue is generated in foreign countries. The high degree of innovation 'made in Germany' is evidenced by the fact that one third of sales are of medical products that are not even three years old. The medical industry benefits from leading research facilities in the various health and engineering disciplines, a high-level healthcare infrastructure with internationally well-known hospitals, and a high degree of manufacturing standards. All those conditions have very much contributed to the fact that the German medical technology sector was robust enough to come through a challenging year 2020 in which the corona pandemic led to significantly lower medical product demands in certain product categories, for instance in the area of elective surgery. On the other hand, overall key figures show that most of the German medical technology companies went better through the crisis than expected, particularly those which are involved in delivering life saving solutions to prevent or treat Covid-19 related diseases. In addition, several further trends such as digitisation and artificial intelligence had an economic growth impact on medical technology companies in 2020.

German companies with strong response in the pandemic

The medical technology industry is a major pillar within modern healthcare systems providing innovative solutions for major challenges and needs. In 2020, this has been stronly demonstrated with regards to the Covid-19 pandemic. German medical technology companies were and still are at the forefront of providing essential products and solutions in the fight against Covid-19. Be it face masks, ventilators, diagnostics or the technologies



needed to build and produce those products - a large number of German international and mid-sized companies are currently involved in those areas. However, many companies are also recording sales losses and will probably see lower business in the months to come. According to latest figures of German industry association SPECTARIS, 69 percent of the companies expect overall sales figures to be worse in 2020 than in the previous year, while 14 percent expect sales to remain the same and 18 percent expect sales to increase. The association now expects total sales of 32 billion euros for the 2020 financial year, of which 20 billion account for foreign sales. This corresponds to a total decrease of 3.6% compared to the previous year. Nevertheless, the total sales volume is still higher than the 2018 figures, when sales of 30 billion euros were generated. This demonstrates that German medical technology companies are still well positioned to be a reliable partner, even in difficult times.

Important cornerstone of the economy

In addition, the medical technology industry in Germany remains to be an important cornerstone of the German economy. The more than 1,375 companies with over 20 employees provide over 149,000 jobs. If you count small

companies and retail companies, the industry has a total of 12,500 companies with more than 210,000 employees and in 2020, more increase than decrease took place. The German medical technology industry is strongly characterised by medium-sized companies. Around 95% of the approximately 1,375 companies have fewer than 250 employees. Almost 900 companies have fewer than 50 employees.

The international business in particular is still very much in the focus of many stakeholders, particularly with regard to emerging markets in Asia or the Middle east. In the long-run, experts see German companies as one of the major partners to support new infrastructure for a better medical healthcare. With regards to the global medtech market, other structural factors, such as global population growth, new technological developments for better diagnosis and treatment, demographic change in more mature economies, the increase in lifestyle diseases and the continuously increasing importance of health as a vital good, are also driving demand. It is therefore assumed that the medical technology market will grow in the long-run, also beyond covid-related products and solutions. With their high innovation standard, German manufacturers are well positioned to drive this development and maintain their leading position in

the global medtech market. Germany currently accounts for 12 percent of global medical technology exports. The industry is thus the world's vice export champion, only the US-American manufacturers export more goods.

Additive manufacturing on the rise

Another topic further gaining momentum in the German medical technology industry is additive manufacturing which is continuously developing towards industrial applications. During the pandemic, this development was pushed forward with regard to new opportunies to use 3D printing for faster manufacturing processes. Enormous progress has been made from initial prototype construction to automated series production. Many companies in the value chain have enlarged their 3D printing services, have incorported new business areas with a focus on additive manufacturing or have started to invest in start-ups. This is also reflected by the diversity of devices and functionalities presented for medical applications of 3D printing at relevant digital industry events and digital trade fairs in 2020. In particular, promising applications are seen with regard to personalised and individually designed products. Here, 3D printing offers the advantage of a quick and cheap manufacturing process which is more needed than ever in the medical technoloy industry.

Personalised implants with 3D printing

Another promising application area for novel additive manufacturing processes are clinical surgery settings. For dental or neurological indications, for instance, custom-fit implants are often required on short notice. For this reasons, hospitals have started to set up their own 3D printing manufacturing capacities next to the operation theatre, so that patient-specific implants can be produced within 24 hours. Another promising area of 3D printing with high expertise in Germany is bioprinting. Tissue constructions can be produced in the shortest possible time and with individual, complex shapes. For instance, some researchers want to replace destroyed tissue with biological-functional tissue from the 3D printer. They are developing biological inks from natural materials that come very close



to human ideal. Furthermore, companies developed novel products such as ultrathin monolithic 3D printed optical coherence tomography endoscopy for preclinical and clinical use. With regards to materials used in additive manufacturing lots of progress have been made as well, for instance by using PEEK or metal powder.

Industry 4.0. revolutionises medical technology

A big trend in the German medical devices industry of today is the digital transformation and the integration of novel solutions into this highly regulated sector. Fields of application range from logistics to smart production plants, integrated software solutions, connected devices to a digital hospital supply. New systems for automated batch management, near-real-time quality assurance or cyber-physical systems that interconnect machines and product carriers will become important in the next months and years. Smart and automatically convertible systems allow smaller batch sizes to be produced economically, which is becoming increasingly important as personalised medicine progresses. For manufacturers and suppliers in the medical technology sector this means, that in the longterm, the type of products they produce will change. They are being digitized, contain more electronics,

need the smallest electronic components such as microbatteries and powerful IT hardware, have interfaces for networking and be equipped with software. At the same time, the wave of digitization is also spilling over into the manufacturing area: process efficiency, process monitoring, process control – what is commonly summarized under the keyword Industry 4.0 is on everyone's lips these times. The term also stands for the demand for a leaner production and a continuous increase in added value. From this background, experts are working on novel strategies to set up advanced systems engineering approaches and digital process architectures to help shorten development and manufacturing times and costs in the medical technology sector.

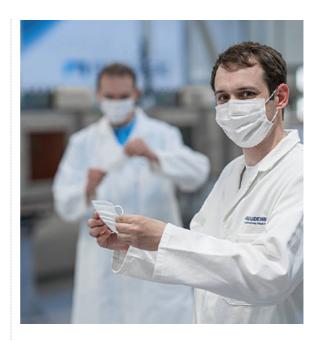
Major push for digital health

This developement is accompanied by the growing demand for digital medical products such as online therapies and medical apps. In November 2019, the German Parliament passed the Digital Care Act which came into effect in January 2020. This law and the corresponding "better care through digitisation and innovation" law has been very much anticipated by the medical technology sector. Be it anxiety disorders, obesity, and sleep disorders – for all these diseases

there is now an app available as a prescription for the first time, approved by the Federal Institute for Drugs and Medical Devices (BfArM) as Digital Health Appliacation (DiGA) and reimbursed by the statutory health insurance companies. This means that digital medical devices of lower-risk classes have an important entry point into German standard care. With around 90 consultations since the beginning of May, and the first applications starting on the day the electronic application portal was published in October, this process has got off to a good start. In the long-run, hopes are now high that digital healthcare in Germany will finally gain momentum and not fall behind in comparison to the international level. It is also seen as an opportunity for innovative companies that previously were more likely to first enter the US or Chinese markets because of the previous high entry barriers in Germany. They will now be able to bring their products and services to the German market more easily.

New MDR - still a challenge

The new EU Medical Device Regulation (MDR), for which the end of the transition period is scheduled for May 2021, is still one of the major topics causing turbulence in the German medical technology industry. In May this year, it sounded like the great exemption: the postponement of the start of application due to the corona pandemic was thought to provide some more time. Many experts agreed that as of May 26, 2020, the system would not have been sufficiently prepared for the implementation of the EU MDR. From this perspective, this step was very much welcomed. At the same time, the companies urged the EU Commission to use the time gained to finally get the MDR system ready. But at the end 2020 those expectations have not fulfilled. Even now, there are not enough notified bodies certified. However, for most experts not next May 2021, but the years 2022 to 2024 will be the most critical periods to watch. By then, a huge number of expiring MDD certificates will appear which will lead to massive problems in 2023 and 2024. During 2020, a lot of companies have pushed forward re-certification, early recertification or certificate changes of medical products. Those will be added to the already high number of



those with already expiring MDD certificates for 2023/24. For this reason, experts working in the notifed bodies are warning that the system will most probably collaps of no other solution appears in the future.

Added to this are the difficulties in the wake of the pandemic in being able to carry out tests and audits at all. It took everybody in the industry a while to develop standards for remote audits, and only be early December regulators released a guidance on how to perform online audits under the EU-MDR framework. Many notiefed bodies are now facing the problem, that due to the remote audits in the first lockdown, a backlog of unfinished audits has already built up, which could not be fully reduced over the summer. With the second pandemic wave rolling over Europe at the end of 2020, this problem was intensified. They therefore already see considerable bottlenecks for the audits planned in 2021. Questions like these are currently confronting all experts in the industry with unsolved problems. And they will further exacerbate the bottleneck problem in 2021, as the foreseeable time and human resources required are a further challenge as well.

Our Cooperation Partners

New business through innovation in Germany

Germany Trade & Invest is the economic development agency of the Federal Republic of Germany. The company helps create and secure extra employment opportunities, strengthening Germany as a business location.

With more than 50 offices in Germany and abroad and its network of partners throughout the world, Germany Trade & Invest supports German companies setting up in foreign markets, promotes Germany as a business location and assists foreign companies setting up in Germany.

Medical technology-specific information and support includes:

- Market research and industry reports
- Financing and incentives options
- Tax and legal information
- Regulatory and reimbursement information
- Matchmaking with industry and science
- · Site selection

Readers of the Guide to German Medtech companies are invited to contact GTAI should they need any support on their way to becoming established in Germany. This publication is of great value to companies looking to find out who's who in the German medical technology sector as well as seeking partners in Germany. GTAI's expert team is ready to assist your search for joint-research and contract manufacturing-project candidates across the country.

Advantage Germany

German medical technology is cutting edge. Hundreds of companies – nearly all of them small or medium-sized – produce medical technology innovations across the entire spectrum of products. Many specialise in very specific fields of applications or types of products.

While these companies may focus on niche markets, they are often world market leaders in their respective fields. Moreover, they continuously strive to improve their existing products: one in three products on the market has been developed within the last three years, with companies investing around nine percent of turnover in R&D.

Close cooperation between Germany's manufacturers and hospitals, universities and a plethora of research institutes helps the country maintain its internationally unparalleled competitive edge. R&D projects in the medical technology sector can also count on numerous types of financial support in the form of grants, interest-reduced loans, and special partnership programmes.

Germany is home to more than 30 medical technology cluster networks. Their goal is to achieve continuous innovation in R&D – as well as in manufacturing – by connecting companies, hospitals, universities, and other research institutions.

Dedicated cluster management teams help obtain funding for joint R&D projects, provide shared facilities, and organise educational training programmes for their members. A detailed overview of the cluster networks can be obtained from GTAI. Individual company requests are welcome.





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Health Made in Germany

Germany is one of the world's most important providers and exporters of healthcare products and services. The country's innovative medical products set international standards for quality, safety, and reliability. German manufacturers and service providers in all health and life sciences segments attract overseas customers and partners and deliver leadership in healthcare innovation.

HEALTH MADE IN GERMANY is the export initiative for the German healthcare industry. It supports international companies and organisations that are interested in establishing contact with potential German partners and suppliers. Set up by the German Federal Ministry for Economic Affairs and Energy (BMWi), the initiative bundles expert market intelligence for easy industry access. One of the initiative's main goals is to promote the German healthcare sector through international networking activities for the mutual benefit of international partners and German companies alike.

HEALTH MADE IN GERMANY does this by providing proactive support (including market and regulatory insight), introductory services, and networking platforms including trade events at home and abroad. The initiative serves four major industries active in the international medical market: pharmaceuticals, medical technology, medical biotechnology, and digital health care.

HEALTH MADE IN GERMANY also works closely with 16 major German industry associations and is part of the BMWi's MITTELSTAND GLOBAL umbrella program for small and medium-sized enterprises. The initiative is ideally placed to provide access to German healthcare market information and to help overseas businesses identify potential German partners.

The HEALTH MADE IN GERMANY initiative is implemented by Germany Trade & Invest, the economic development agency of the Federal Republic of Germany, on behalf of the BMWi.

For more information: www.health-made-in-germany.com

Our support for your business:

- · We publish market briefs, in-depth market studies and company directories of the German healthcare industry and its different sectors.
- Our calendar is regularly updated with the latest industry events in Germany and overseas.
- We provide free access to 3,500+ German healthcare companies with our online database. Detailed company profiles and direct contact information help international businesses to identify potential suppliers and partners in Germany
- We take part in leading healthcare trade fairs all over the world, organise networking events, and enjoy ongoing dialogue and exchange with international health policymakers.
- Visit www.health-made-in-germany.com for more information about the German healthcare industry and all HEALTH MADE IN GERMANY activities.





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BVMed - The German Medical Technology Association

As a trade association, BVMed promotes and represents the interests of more than 230 German and international industrial and commercial companies in the field of medical technology to politicians and the public. This is done by actively helping to shape laws, guidelines, regulations, and standards, as well as by information and public relations work. BVMed is the voice of the German medtech industry and, above all, of medtech small and medium-sized enterprises.



Our services include:

Organisation

BVMed offers its members a platform for constructive dialogue and the joint creation of framework conditions for the industry in more than 80 strategic and technological working committees. See the committee overview at www.bvmed.de/arbeitsgremien.

Advice and information

BVMed's experts assist members in legal, regulatory, political, and business issues through personal meetings, information networks, training courses, seminars, conferences, brochures, newsletters, and digital media. BVMed communicates the importance of medical technologies for patient care through campaigns and public relations work.

Representation

BVMed represents the interests of the medtech industry vis-à-vis political representatives at the EU, federal, and

state level, such as the Federal Joint Committee, the Statutory Health Insurance umbrella organisation, and other health policy players. This is done at parliamentary hearings as well as consultations of the Federal Government, committee meetings, boards of trustees, commissions, background discussions, and other discussion formats.

Network

BVMed regularly conducts exchange formats on a variety of topics with actors involved in healthcare, for example with health insurance funds, the medical profession, hospitals and nursing care, purchasing groups, or patient representatives.



For more information:

BVMed – Bundeverband Medizintechnologie e.V. Reinhardstr. 29b 10117 Berlin, Germany info@bvmed.de → www.bvmed.de

MEDICAL TECHNOLOGY in the German Industry Association SPECTARIS

SPECTARIS represents the interests of around 400 member companies in Germany, with four sector-specific associations in the areas of medical technology, optical technologies, and analytical, biological, laboratory and consumer optics. Through its political activities, public relations, and industry marketing, the association gives its members a voice, formulates new responsibilities, and opens up new markets. This ensures the international competitiveness of German industry in these sectors.

Core services

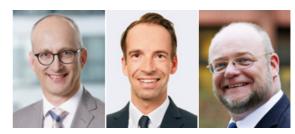
Lobbying | Industry Marketing - SPECTARIS promotes industry interests through our communication channels in politics, economics, science, and the media.

Market Research | Statistics - SPECTARIS creates substantial economic advantages through its national, European, and global market reviews and industry data. Technology Consultation | Research Promotion -SPECTARIS' technological guidance guarantees access to monetary support programmes.

International Marketing | Promotion of Exports -SPECTARIS offers guidance on the global market and supports its members in securing international contacts.

In the medical technologies sector, SPECTARIS represents around 150 German capital goods and auxiliary aid companies who mostly produce high-tech products and have a pronounced export orientation. The member companies cover an extensive research and applications environment which includes medical products for diagnostic and surgery purposes, supply systems, and anesthesia and intensive care devices. The association also represents manufacturers of ophthalmic devices, large and small sterilisers, medical functional room equipment, respiratory home therapy, rehabilitation aids, and orthopedic technology.

The SPECTARIS trade association Medical Technology provides its members with support and information in various business areas and topics. In particular: financing, hygiene and processing, compliance, regulatory affairs, HTA, market access, research funding, and public affairs.



Chairman: Dr. Martin Leonhard, KARL STORZ SE & Co. KG; Vice-Chairman: Friedrich Schmitz, SCHMITZ u. Söhne GmbH & Co. KG; Vice-Chairman: Thorsten Weide, Drägerwerk AG & Co. KGaA

Global demand for German medical technology

- High significance of the European market: 42% of German medical technology exports go to countries within the European Union, a further 10% to the rest of Europe
- North America continues to be an important trade
- · Demand is growing in Asia, particularly from the People's Republic of China
- €33 billion turnover (2019), domestic turnover: €11 billion, overseas turnover: €22 billion
- European medical technology industry: >71,000 companies, €95 bn turnover, 530,000 employees



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Photonics, Analytical and Medical Technologies

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VDMA – Working Group Medical Technology Your network for success

With around 3,300 mostly medium-sized member companies, the VDMA is the largest network organisation and an important voice for the mechanical engineering industry in Germany and Europe. With over one million employees and sales amounting to approximately 229 billion euros (2019), the sector is the largest industrial employer in Germany and one of the leading German industrial sectors.

Production technology & components for medical products in focus

In the VDMA the fusion of machinery engineering and medical technology is manifold and offers tremendous potential for the future. The Working Group Medical Technology represents suppliers, manufacturers of production equipment, and all industry sectors active in the interdisciplinary field of medical technology within a joint platform. The Working Group is especially focused on pooling the heterogeneous interests of its members and providing an information platform for the companies, offering the opportunity to share and access relevant information.

With its huge network, the Working Group Medical Technology is in a position to recommend experts and to assist its members with fundamental issues. It offers market information for German and foreign markets, a comprehensive list of suppliers for the industry, activities for standardisation, and representation of political interest. Regular expert meetings and working groups provide information on various topics, including laws and regulations, production technology, components, and markets.

Another essential part of our activities is the substantive and organisational support of medical technology events through content or strategic partnerships and participation at national and international fairs: as one of the main supporters of the new fair T4M in Stuttgart, through a joint stand at Compamed and two German pavillons in China (Medtec China), and in the USA (MD&M West).

Assistance with research and development

Medical technology is an innovative and dynamically growing sector. Around one third of its sales are generated with products that were launched on the market less than three years ago. In order to constantly renew and expand their product ranges, manufacturers and suppliers invest huge efforts in research and development. Close cooperation among everyone involved from research and development to the supply sector and the manufacturers of medical products – is extremely important in making sure this investment pays off. To aid this cooperation, VDMA's Working Group Medical Technology provides its members comprehensive support in developing partnerships and collaborations. For example, research institutes gain the opportunity to present their developments for medical technology to interested companies at roadshows. In addition, we regularly bring doctors and hospitals together with engineers to discuss the future challenges facing medicine and to help to drive new developments forward.



Working Group Medical Technology



For more information:
Diethelm Carius
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Forum MedTech Pharma – Europe's largest network for innovations in healthcare

In the development of innovations, cooperation agreements are an important factor for giving companies as well as research institutions a competitive edge over their rivals and because of that Forum MedTech Pharma was founded. Since then the association acts as a hub between research, business, clinic, and politics. Forum MedTech Pharma establishes networking platforms for all players in the healthcare sector, promotes cooperations between the different stakeholders, provides contacts and informs about the latest trends and innovations.

- · Innovation support through networking and knowledge transfer
- Technology, market, and healthcare focus
- Approx. 500 members from 15 countries

Our focus

Forum MedTech Pharma focuses on the identification of skills and potentials in the field of business and science. The aim is to initiate innovations in healthcare and therefore constantly increasing the efficiency and quality of medical care. All the players involved with healthcare are integrated into this process: research and development, production, clinical applications as well as cost bearers.

Focus areas and projects

Within its theme-based networks, the association focuses on network projects, different events, and individual services. Accompanying exhibitions, as well as the joint stand at Medica, offering small and medium-sized companies the opportunity to present their innovations in a targeted manner. Further areas of focus for the network activity include the field of education and training in medical technology. The networks topics are based on technology, market access, management, research, development, refunding and marketing. The topics mentioned above provide the basis for: mobile & digital health, robotics & artificial intelligence, regulatory affairs, hospital & clinical trials, and the healthcare system.

- Independent network for innovations in healthcare
- Expertise in subject-focused events, projects and
- · Customized topics adjusted to the needs of our members and clients

The network

With approx. 500 members, Forum MedTech Pharma is one of the leading cooperation networks in Europe. Its member structure - 70% companies. 12% research institutes, 8% hospitals, 7% associations and insurance funds and 3% law firms and lawyers - reflects the heterogeneous nature of medicine and healthcare. Along with Germany, the association has members in nine other European countries, as well as in the United Kingdom, Canada, Australia, Japan and Hongkong. In the 22 years since it was founded, Forum MedTech Pharma has welcomed over 27,000 delegates at more than 270 of its own expert conferences and events. The speakers at the conferences support Forum MedTech Pharma with their knowledge - just like the entire board of directors, chaired by Professor Thomas Armin Schildhauer.

Event: MedtecSUMMIT and MedtecLIVE

At the renowned MedtecSUMMIT & the MedtecLIVE manufacturers, users and researchers discuss future developments of the medical technology industry. The MedtecSUMMIT is organized by the Bavarian Ministry of Economic Affairs, Regional Development and Energy and is hosted by Bayern Innovativ. Forum MedTech Pharma is the conceptual sponsor of MedtecLIVE and Medtec-SUMMIT. The congress agenda covers trendsetting topics such as digital processes, financing and German market access, clinical robotics and smart living. Experts from the medical technology industry will be able to attend the next MedtecSUMMIT & MedtecLIVE from 20 to 22 April 2021.



For more information:

Forum MedTech Pharma e.V. Am Tullnaupark 8, 90402 Nuremberg, Germany med@medtech-pharma.de

IVAM – The International Microtechnology Business Network

The IVAM Microtechnology Network unites people who are excited about key enabling technologies and the way these technologies shape our daily life and our future. As an international business network and technology marketing expert, IVAM connects professionals in the high-tech industries and supports them in bringing technologies and products to market and gaining a competitive edge in international competition. IVAM was founded in 1995 and is one of the most experienced and efficient high-tech industry networks in Germany.

Key enabling technologies: the driver of ever-accelerating change

Key enabling technologies such as microtechnology, MEMS, nanotechnology, photonics, and advanced materials have significantly accelerated innovation in the late 20th and early 21st century. These technologies have affected, improved, or fundamentally changed many areas of society, industry, and the economy – either by improving known products and processes or by triggering entirely new, previously unthought-of applications.

Looking forward, key enabling technologies will provide answers to urgent questions and solutions for global challenges resulting from ever-accelerating change. And they are essential for addressing and reacting to some of the mega trends of the 21st century. For instance, creating a smarter world through continuing digitisation will not be possible without microtechnology products such as sensors, actuators, or electronic components.

Many technologies that emerged in the 1990s, when IVAM began operating, have long since reached maturity. Consequently, technology suppliers today require support in marketing and finding customers. There is a growing need to access international markets. IVAM provides members and customers with business opportunities and international platforms for exchanging knowledge, initiating collaboration, and doing business with each other and with their customers.



Networking and business support worldwide

Medical technology has been the most profitable market for microtechnology suppliers in recent years, and and its growth is continuing. IVAM has established joint trade fair pavilions at some of the most important medical suppliers' trade shows worldwide, such as COMPAMED (DE), MD&M West (US), Medical Manufacturing Asia, MMA, in Singapore, and China International Medical Equipment Fair, CMEF, (CN). In order to push business opportunities even further, IVAM arranges B2B meetings where innovative companies can exchange experience, discuss business ideas, and kick off joint projects. IVAM matches possible business partners and makes appointments, e.g. during trade shows, combined with workshops, conferences, or company visits, and in cooperation with international partner organisations.



For more information:
IVAM Microtechnology Network
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Life Science Nord – working together for innovative medicine

The Life Science Nord Cluster in the federal states of Hamburg and Schleswig-Holstein embraces over 500 biotechnology, pharmaceutical and medical technology companies, clinics and research institutes. About 52,800 employees work in the health industry of Northern Germany*.

In medical technology, Life Science Nord is one of the strongest regions in Germany. Particular features of the cluster are the broad business base and the complete value chains from basic and applied research to clinical studies and the marketable end product.

The good, close cooperation between researchers, clinicians and industrial partners in many fields is reflected in innovative products, projects and technologies.

Cluster management and the association

The cluster management organisation Life Science Nord was set up by the North German federal states of Hamburg und Schleswig-Holstein to develop the cluster into a leading international life sciences network.

The cluster agency Life Science Nord Management GmbH and the registered association Life Science Nord e.V. work together to achieve that goal. Over 260 regional firms and institutions in the health industry are organized in Life Science Nord e.V.. In a joint Life Science Nord partner programme, the agency and Life Science Nord e.V. offer their members numerous activities aimed at promoting regional networking, sharing experiences and know-how and jointly representing the regional life sciences industry on a national and international level.

In 2018, Life Science Nord was awarded the Gold Label of the European Cluster Excellence Initiative for the second time.

What Life Science Nord offers:

- Comprehensive support in initiating innovative projects, arranging contacts to experts and providing know-how
- Fast and uncomplicated access to regional, national and EU funding programmes
- · Admitting members to the network and helping them position themselves within the Life Science Nord Cluster
- Extensive opportunities for collaboration within an international industry network
- Participation in leading international and national industry trade shows
- Providing data on business and technological capabilities in medical technology, biotechnology and pharma in Northern Germany
- Providing the latest information on developments in business and science
- Access to platforms on which the cluster players can exchange information and which support the dissemination of new developments in the cluster. This also includes the online newsletter and the Life Science Nord print magazine, both of which can be subscribed to via the website free of charge.



For more information:

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^{*}According to WifOR Study for 2018

MedicalMountains – a strong network for a successful future

Baden-Württemberg is one of the leading locations in the medical technology sector. Its attractiveness reaches far beyond the country's borders. The district of Tuttlingen alone counts a concentration of more than 400 enterprises of the sector. For this reason, the region is also known as the "World Centre of Medical Technology". For many years, tradition and innovation have gone global from here.

Nonetheless the strongly regulated market and an intensely competitive environment raise permanent challenges for the sector. That is why a well-focused management of continuous advancement and an innovative network are an indispensable basis for long-term global success.

Success factor innovation – ideas that build bridges to the future

We are MedicalMountains: A cluster initiative for the medtech industry based in the heart of the World Centre of Medical Technology.

Shareholders of the MedicalMountains GmbH are the Schwarzwald-Baar-Heuberg Chamber of Commerce and Industry, the Tuttlingen District, the NMI Natural and Medical Sciences Institute at the University of Tübingen, the Surgical Mechanics Guild Baden-Württemberg, the Hahn Schickard Society for Applied Research, the Chamber of Crafts Constance and the city of Tuttlingen.

Our particular interest is to strengthen innovative capacity and long-term competitiveness, both for single companies as well as for the entire medical technology business cluster.

For this purpose we actively represent the interests of medtech enterprises on a political level, encourage innovation and technology transfer by directing work groups or R&D projects, organise training seminars and other informative events, and provide support for other service topics such as internationalisation or common marketing activities, amongst others.

MedicalMountains – more than just a loose affiliation of companies

The companies of the cluster consist of more than 90% small businesses and mid-sized companies, making the importance of the network even more crucial now than ever before. The medical sector is experiencing constant change and increasing competition worldwide. For companies of any size, collaboration and exchange with regional partners brings immense knowledge and a lead in technology – as well as enhancing the appreciation of the location for the region itself. MedicalMountains brings order to this natural, mutual structure. Future-oriented, prudent management is the basis for effective, constructive and farsighted developments in medical technology.

In collaboration with a growing network of industry, research institutions and government policies, the cluster initiative MedicalMountains actively represents the interests of medtech enterprises. The focus of the cluster initiative is to promote growth, strengthen competitive advantages, and increase the sector's international visibility even further. For this purpose MedicalMountains provides a platform for regular dialogue and technology transfer. It brings forward innovation by initiating directed project works, promotes qualification of specialised staff, and advises on subsidies or the opening up of new foreign markets. Our way of working is based on a close collaboration with the companies of our network.





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Cluster of excellence -Medical Valley EMN

The Medical Valley European Metropolitan Region Nuremberg (EMN) Association is an internationally leading innovation ecosystem in the area of healthcare management.

Highly specialised research institutions, international leaders, and at the same time many growing companies: all of them are active here. They cooperate closely with world-renowned health research institutions in order to jointly find solutions for the challenges of health care today and tomorrow.

This extraordinary concentration of players, combined with the international market and competitive position of individual actors, plus the unique infrastructures and services, all provide the conditions that allow ideas to be turned into products, processes, and services more quickly.

The nationally and internationally outstanding position of this economically strong region was additionally strengthened in January 2010 when it was designated a "National Top Cluster" for medical technology by the Federal Ministry of Education and Research (BMBF).

In April 2017, Medical Valley, in cooperation with the Zollhof Tech Incubator and the Health Hackers, was named one of twelve national "Digital Hubs" by the Federal Ministry for Economic Affairs and Energy - the only one that focuses exclusively on health.

The Medical Valley European Metropolitan Region Nuremberg (EMN) Association currently has more than 210 members from business, science, healthcare, networks, and politics and has been contributing to the further development, coordination, and marketing of this eco system since 2007.

Current activities of Medical Valley EMN include operation of the innovation centres Medical Valley Center Erlangen and Forchheim, coordination of the Bavarian Cluster of Medical Technology (in cooperation with Forum MedTech Pharma), establishment and presentation of the Medical Valley Award (award for research teams in pre-founding phases), and the coordination of the



platform "Digital medicine/health" in line with Zentrum Digitalisierung.Bayern.

Furthermore, Medical Valley EMN is a member of the consortium of EITHealth, a consolidation of European partners, that develops – within the scope of Horizon 2020 - new solutions related to the topics "Promote Healthy Living", "Support Active Ageing", and "Improve Healthcare". With a budget of up to €80m p.a. for the next 7 to 15 years EIT Health is currently one of the largest health research programmes worldwide.

In 2019 the dmac – Digital Health Application Center was founded in Bamberg. dmac is another essential hub in the Medical Valley eco system and offers support and expertise for companies on their way to the digital medicine of today and tomorrow.

Contact the cluster for more information:



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microTEC Südwest – High-tech solutions for health

Our cluster

The leading-edge cluster microTEC Südwest e.V. is the competence and cooperation network for intelligent microsystems technology solutions for Europe and the contact for microsystems technology in Baden-Wuerttemberg. The cluster has set itself the task of expanding Baden-Wuerttemberg's internationally impressive position in the field of microsystems technology.

The cluster currently has about 120 members covering up the complete range from startups, to small and medium-sized enterprises, up to large enterprises, research institutions, and universities as well as further institutions.

Mission and topics

The mission of microTEC Südwest is the stimulation and promotion of cooperations in microsystems technology, utilising synergies and leading to economic dynamics. Our focus is on health (Smart Health) and production (Smart Production). Further activities address topics such as Smart Home, Smart Energy, and the Internet of Things.

In five different expert groups, microTEC Südwest bundles its expertise in order to jointly produce innovations in the field of microsystems technology.

Smart health

The expert group in vitro diagnostics aims to promote the transfer of technology and knowledge between research and industry in the field of in vitro diagnostics, including e.g. the application focus of decentralised testing/point-of-care diagnostics. Topics of the latest expert group meetings include e.g. Big Data for Next Generation Sequencing, telemedicine, and patient self-tests.

The expert group micro medical technology focuses on the development of useful and safe products in the field of micro medical technology. It is thus committed to the research, development, approval, and reimbursement of these products, more specific diagnostic procedures, more effective therapies, and aids for rehabilitation



suitable for everyday use. Topics dealt with in the group include e.g. artificial intelligence at active implants, market trends, and minimally invasive diagnostics.

microTEC Südwest has been involved in different medical technology projects. An outstanding example is the project 3D Bio-Net, in which a 3D-bioprinter, suitable for multimaterial printing has been developed. Excellent results have been achieved in printing human tissues together with blood vessels. In addition, it was possible to print tailor-made and perfused microfluidic chips (for kidney & skin). This is an essential success in the development of persistent and vital organ models.



For more information:
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Emmy-Noether-Str. 2
79100 Freiburg im Breisgau, Germany
→ www.microtec-suedwest.de

Video Production

Our videos tell stories. The people behind research and development come to life. We combine the essence of film – tension, atmosphere, emotion – with the precise information of science communication. Our unique videos facilitate access to the life sciences while at the same time attracting attention and imparting knowledge.

Participants of the Guide to German Medtech Companies 2021



UHLMANN GROUP

medical metal





























































The shortage of skilled labour is a serious obstacle to growth for businesses in many European countries. At the same time, in many places well-qualified people are looking for a job – they might even want to work in another European country. Unfortunately, the labour markets in Europe are very diverse. How do I find a new job or a new employee? Now, there is an easy solution: **eurobiotechjobs.net**, the new, Europe-wide job market for biotechnology and the life sciences. Presented by the European Biotechnology Network.

eurobiotechjobs.net

Profiles of German Medtech Companies



Name · A.K. TEK GmbH

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Website • www.ak-tek.de

Founded (year) · 2003

Areas of Activity • | 0EM

∣R&D

The combination of development and production competence

"The origin of all technical achievements is the constructive fantasy of the technical inventor." (Albert Einstein). Einstein's quote aptly describes what motivates A.K. TEK on a daily basis, because the "daily bread" is the translation of natural phenomena.

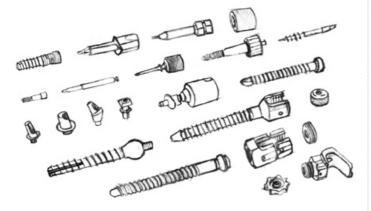
In the field of medicine technology, A.K. TEK provides the combination of development expertise with highend manufacturing technology, smart surface technology and continuous quality assurance. Due to decades of experience, the A.K. TEK is a sought-after development and manufacturing partner in medicine technology – from individual to series production.

As industrial and project partners, the A.K. TEK is dedicated to current issues and takes part in important competitions at state and federal level, where the focus is on innovations in medical technology. The application and implementation of the latest technologies available are always in focus at A.K. TEK.

Range of services

Further development and manufacture of dental implant systems, dental regulating components and retaining elements is developed with close and trustful cooperation with customers, implantologists, hospitals and universities – as well as with the inclusion of patient feedback.

A good example of the variety of services and products A.K. TEK offers, are the dental implant moulds with specific surface types in combination with tailored system components. Together with leading manufactures of dental drills, A.K. TEK has developed a drill geometry that ensures a higher primary stability of the implant, thus essentially improving both the comfort of the implantation, as well as the handling by the operator.









In collaboration with surgeons, A.K. TEK has designed and manufactured individual solutions for the specialist area of spinal surgery, in particular, bone screws and innovative components, for example, for artificial disc replacements (cages).

The development of surgical implant systems for hand surgery is another component of A.K. TEK's portfolio. The A.K. TEK also has sufficient experience in the production of medical components - for example, for minimally invasive surgery.

Continuous quality standard

Production is carried out exclusively on Swiss precision machines that meet the highest quality requirements. The product tests are carried out according to AQL (Acceptable Quality Level) and individually agreed standards in compliance with customer specifications. To be able to continue meeting customer requirements, A.K. TEK also has cleanroom technology (ISO Class 7/US Cl.10.000) on site - thus A.K. TEK is able to carry out parts cleaning, component assembly and packaging under cleanroom conditions.

Further information can be found at: www.ak-tek.de



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State · Bavaria

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Social Media · in *

Number of Employees · 45

Founded (year) · 1991

Areas of Activity • | Housing solutions for medical devices | Development and manufacturing of small series

| Production tooling

| Prototyping for product development

| Replacement of cost-intensive components by injection moulding parts

External • | Ardo medical AG

Collaborations | B. Braun Melsungen AG

| BrainLAB AG

| essentim GmbH

LiSYS Medizintechnik GmbH

| Medtronic plc

| SOMNOmedics GmbH

acad group GmbH for success

The whole development process from just one source - this has been acad group GmbH from Bavaria since 1991. Our medical section is built from acad systems and acad prototyping. Creative designs, intelligent execution, certification, assessment, and optimisation are steps in a typical product development cycle. prototyping und systems work together hand in hand to execute the subprocesses that play a key role in completing a project efficiently and effectively.

acad systems for product development of medical devices

Our innovative housing solution is ideal for the development and manufacturing of small series. We can help you bring your ideas to market quickly, even with a low production volume. acad systems develops innovative housing solutions to make this possible. We start series from 100 up to 2,000 pieces. We also procure all vendor components, secure validation and evaluation, and support you in converting your idea to high-volume production.

Overview of the business concept of acad systems:

- · development of innovative housing solutions for medical devices
- · integration of embedded systems through close cooperation with software and hardware development
- small series productions up to 2,000 pieces
- toolmaking with plastic components
- inexpensive in-house manufacturing of plastic components

Member of









Zero-Power Switch



Vagusnervstimulator



acad prototyping for plastic parts in rapid moulding

Your ideas are our projects because we make your ideas real. Prototyping is driven by improvement. Prototypes are the ideal way to achieve product approval and safeguard the development process through extensive testing. Prototypes also help to determine where further development is needed. The processes available for manufacturing a prototype will depend on how far along it is in the process of development and the security measures required. If you need a prototype that is rigid enough and stable enough to be a series product and want to test the capabilities of the injection moulding process, original production material and injection moulding technology will be your best option.

Overview of advantages of acad prototyping for customers:

- high level of protection during product development
- reduction of risk involved in changing production
- quick availability of prototype components in original rigidity/stability
- low costs for tooling and revisions
- representation of alternative geometries from one tool
- optimisation of gating

Symbiosis of development and component production in plastic injection moulding

The Stealth Autoguide from Medtronic plc in Dublin, Ireland, is a robot-supported positioning system for cranial procedures. It consists of a control unit for the control system and a robotic unit for positioning. The casing components are injection moulded at acad group GmbH, painted, printed, and delivered to the USA for final assembly.

With our expert services we are your partner for medical devices and the production of injection moulding preseries and small series.



Name · Aristotech Industries GmbH

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State · Berlin-Brandenburg

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Website · www.aristotech.de

Number of Employees • 130 Founded (year) • 2006

Areas of Activity · Contract manufacturing for medical

devices

| Implants and instruments

| Logistics

| Material/Product testing

| Project management

| Worldwide servicing

AristoTech – we bring your design to life

AristoTech Medical Forgings and Services specialises in contract manufacturing of orthopaedic devices and medical products, implants, and instruments worldwide.

Based near Berlin, Germany, the company supplies OEM companies with standard and customised medical devices that meet ISO guidelines for safety, quality, and efficiency.

AristoTech Industries offers expertise from design and development, engineering, and product testing through finished goods manufacturing to logistical services as cost effective solutions.

This distinctive expertise allows the company to realise innovative projects beyond the ordinary; products can be designed according to individual customer requests in order to support quick and efficient market entry. Whether tooling or finished parts, each item undergoes continuous, rigorously intensive inspection in AristoTech's in-house laboratory. To guarantee the best possible quality, the highest standards of measurement and inspection are applied according to ISO 13485 standards – all *Made in Germany*.

Standard generic product designs for:

- HIP stems
- HIP cups
- Screws
- Bone screws
- Bone plates

can be chosen off the shelf, saving costs and time for processing customised tools.









>> Discover more:

ARISTOTECH

AristoTech's expertise includes hip stems, acetabular shells, femoral heads, knee & shoulder components, osteosynthesis plates, as well as foot & ankle devices and bone screws.

Depending on the customers requirements, the company supplies semi-finished, finished, packed, and/or sterile products, as well as offering all logistical services.

State-of-the-art machining technologies include closeddie forging and bone in-growth coating, with 3D metal printing in the near future.

AristoTech has long-term, global experience in manufacturing medical devices and processing all kinds of implants.

This expertise, and a highly qualified engineering team, offer cost-effective, German-made medical solutions to the world.



Name • B Medical Systems

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Social Media · 🖒 🎔 in 🖸

Number of Employees • 200-300 Founded (year) • 1979

Areas of Activity • | Vaccine Cold Chain

| Medical Refrigeration solutions | Blood Management solutions

Who is B Medical Systems

B Medical Systems is a global manufacturer and distributor of vaccine cold chain and medical refrigeration solutions. Based in Hosingen, Luxembourg, B Medical Systems is the global market leader in vaccine cold chain and is a recognised innovator in the medical refrigeration industry. It manufactures and distributes medical refrigeration solutions such as vaccine refrigerators, laboratory/pharmacy/blood refrigerators, lab/plasma freezers, contact shock freezers, ultra-low freezers, and transport boxes for medical grade storage and transport purposes around the world. All products are Class I or Class II(a) certified medical devices as per EU MDR regulations.

A wide range of medical refrigeration solutions

Alongside its product lines for the Vaccine Cold Chain and the Blood Management solutions, B Medical Systems develops medical refrigeration solutions for research laboratories, universities, biobanks, pharmacies, and hospitals. The Pharmacy and Laboratory Refrigerators are designed to store vaccines, medicines, and samples at a temperature range of 2° C to 8° C, while the Laboratory Freezers can ensure a reliable storage at temperatures ranging from –20° C to –41° C. For ultracold temperature needs, B Medical Systems' Ultra-Low Freezers can easily reach temperatures ranging from –20° C to –86° C.

All these products have integrated remote monitoring and alarm systems allowing the safe storage of the specimens. Moreover, the high-quality materials used ensure better longevity and easy hygiene control, while the excellent storage capacity and modularity of the units allow the customers to make the best use of all the space available.



Reliable solutions to store your samples and products



Reliable transport solutions

B Medical Systems also provides transport solutions for the safe transport of vaccines and biological specimens. The model ranges include five passive transport boxes with different storage volumes and one active transport refrigerator working with a compressor. These models are ideal for intensive use with many transport applications across various temperature ranges (-78° C to +8° C), even under difficult ambient conditions.

The COVID-19 emergency

Since the beginning of the COVID-19 pandemic, B Medical Systems has been hard at work with various governments and organisations to prepare a cold chain infrastructure for the arrival of a new vaccine, whatever its temperature requirements may be. Our highly reliable Ultra-Low Freezers have been in high demand as they can cover a broad temperature prerequisites ranging from -20° C to -86° C, while our Laboratory Refrigerators can be used for the more common specifications ranging from 2° C to 8° C.



Name · B. Braun SE

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Website · www.bbraun.com

Social Media · 🖒 🎔 in 🗸 🗅

Number of Employees · over 64,000

Founded (year) · 1839

Areas of Activity • Medical technology & medical services

Annual Turnover • €7.5bn
Relevant R&D Budget • €365m

Member of





B. Braun - Sharing Expertise

B. Braun is one of the world's leading providers of healthcare products today, supplying the global healthcare market with products and systems for anaesthesia, intensive care, cardiology, extracorporeal blood treatment, and surgery, as well as providing services for clinics, physicians in private practices, and the home care sector.

Every service provided by B. Braun incorporates the entirety of our knowledge and skills, the company's deep understanding of users' needs – and 180 years of extensive expertise. With its constantly growing portfolio of effective medical care solutions, B. Braun makes a substantial contribution towards protecting and improving people's health. Located in Melsungen, north of Hesse, the family-owned company has been developing, producing, and distributing products and services for medicine, and with its modern approach and innovative strength, it has developed into a worldwide group of companies and a leading supplier for the healthcare market.

- B. Braun not only exports all over the world, it also has business activities in many different countries. With almost 64,000 employees in 64 countries, B. Braun develops high-quality product systems and services for users around the world. In 2019, the Group generated sales of approximately €7.5 billion.
- B. Braun's target customers are hospitals, medical practices, pharmacies, and care and emergency services. The product spectrum ranges from infusion solutions, injection pumps and accessories for infusion therapy, intensive medicine, and anaesthesia to surgical instruments, sterile containers and sutures, hip and knee endoprostheses, power systems and accessories for extra corporeal blood treatment, and products for wound care. The complete range encompasses more than 5,000 different products, 95 per cent of which are manufactured by the company. In addition, the company offers consulting services, for example helping hospitals to optimise their processes and assure quality, or preparing patients and their families for home





handling all the formalities for them, supporting them in the transition period, and ensuring that they receive qualified care.

- B. Braun draws its innovative strength from a corporate philosophy that promotes the exchange of information and experience both within the company and also with practitioners in hospitals. In dialogue with those who use B. Braun products everyday, "Sharing Expertise" is the best way to gain knowledge and to process this into product engineering. In this way B. Braun helps to optimise processes in clinics and practices and to improve safety in healthcare.
- B. Braun invests in production facilities around the world, for example in Malaysia, Indonesia, Switzerland, France, Spain, Japan, and the USA, With this investment B. Braun shows its commitment to these locations. This also includes accepting social responsibility and promoting diversity through cultural engagement. There are numerous models: B. Braun provides financial and organisational support in art, cultural, and sports projects; it is a partner in Private Public Partnerships; and it has assisted universities, doctors, and students through scholarships or in the organisation of scientific events. Since 2003, within the initiative "B. Braun for children", every B. Braun company has promoted a project for children that helps to secure the future and improve the living conditions of the next generation. In 2019, B. Braun supported a total of 252 social projects, about 1/4 of which are in the area of education. This social engagement, the dialogue with specialists, the development of new and improved products and the production processes, as well the promotion of system partnerships with our customers - all of this serves the ultimate objective of B. Braun: to protect and improve the health of people around the world.



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Website · www.bayoomed.com

Founded (year) · 2001

Areas of Activity • | Medical

| Healthcare

Application

| Software

Member of





BAYOOMED medical software

BAYOOMED is the medical software division of BAYO-ONET AG and specialises in the development of medical apps and medical (standalone) software. BAYO-OMED is one of the most experienced medical software engineering companies in Europe, serves more than 800 customers, and has more than 25 years of extensive project experience in software development in the regulated pharmaceutical and medical industry.

mHealth/eHealth

BAYOOMED has expertise in the development of mHealth/eHealth applications in iOS (iPhone & iPAD) and Android for the medical device classes I, IIb, and III as well as for the software safety classes B & C.

ISO 13485 certified

We are certified by TÜV Hessen according to ISO 9001 and ISO 13485 and develop software in accordance with IEC 62304. We support our customers in all software-product lifecycle phases for standalone-software, embedded solutions, and medical apps:

- · setting up evaluable and verifiable requirements
- creation of the specification and the requirement specification
- · software architecture and design
- controlling of external soft- and hardware service providers (off-shore development)
- training of internal software developers (hands-ontraining and code review)
- development of critical modules or the entire application
- creation of a QM system for software
- hardware connectivity (e.g. laser, radiography, blood pressure, ultrasound, imaging, ventilation, surgical technique & facility, etc.)
- risk-management in accordance with ISO 14971
- · validation and verification
- · unit-testing and manual test
- · creation of the technical documentation
- · release in app stores
- CE Mark/FDA approval
- · approval & market observation



CE labelling & FDA approval

For more than 21 years BAYOOSOFT Risk Manager (www.riskmanager.net) has been the global marketleading and validated software solution for the technical documentation of medical devices. BAYOOSOFT Risk Manager is compliant with FDA 21 CFR Part 11 and creates the risk management file (ISO 14971), the usability engineering file (EN 62366), and the conformity report for medical electrical equipment (IEC 60601-1), as well as the essential requirements in accordance with MDR 2017/745 and IVDR 2017/746. The solution provides full coverage of the process Clinical Evaluation MDR 2017/745 & MEDDEV 2.7.21 rev 4 and offers an intuitive way to identify, evaluate, and analyse relevant data for the final report. The validated approval accelerator generates technical documentation conveniently and reliably for medical devices and in-vitro diagnostic products.

Medical data protection

Since 2008 the Access Manager (www.accessmanager. net) has provided a transparent and simple software solution for access and identity management for fileservers, SharePoint, and Active Directory for medical device manufacturers, pharma and hospitals. Especially for highly sensitive medical & patient data, it ensures information security by continuously monitoring access rights and an audit trail over all authorisation changes. Using the Access Manager, there is no longer any need to carry out time-consuming processes manually, such as assigning and removing rights, setting up new, protected directories, and creating reports on existing access permissions.

Free trial version & online presentation

We would be happy to introduce you to the performance of our products and our competence in medical software engineering services in a free online presentation.

Additional information about us and a free trial version of BAYOOSOFT Risk Manager are available at www. riskmanager.net.



Automation

Name · Camozzi Automation S.p.A.

Address/P.O. Box · Via Eritrea, 20/1 Postal Code/City · 25126 Brescia

Country · Italy

Subsidiary:

Camozzi Automation GmbH

Address/P.O. Box · Porschestrasse 1

Postal Code/City · 73095 Albershausen

State · Baden-Wuerttemberg

Contact Person · marketing@camozzi.com

Telephone + +39-30-37921

Email • info@camozzi.com

Website • www.camozzi.it

Social Media · in 🖸

Number of Employees · 2000 Founded (year) · 1964

> Areas of Activity • Manufacturer of Components for Industrial Automation, Transportation, and Life Science

Annual Turnover · €247m Relevant R&D Budget · 6%

External · Partnership with important

Collaborations universities (Berkley, IIT Genova,
Politecnico di Milano, Università di
Brescia, Università di Udine) –
Partnership with Research Centers in
Germany and Spain

Member of



Components and solutions for your industries

Founded in 1964, Camozzi Automation has become a global leader in the production of components, systems, and technologies for industrial automation, the control of fluids – both liquids and gases – and specific applications dedicated to the transportation and life science industries. Its offerings include increasing numbers of IIoT products, both for the digitalisation of production processes and the creation of real cyber-physical systems.

Components and systems for the life science sector

The Fluid Control department responds to the needs of an increasingly complex and innovative market, in both the industrial and the life science sectors. This division provides solutions that are designed, developed, and tested in exact accordance with customer specifications, in order to achieve increasingly customised solutions.

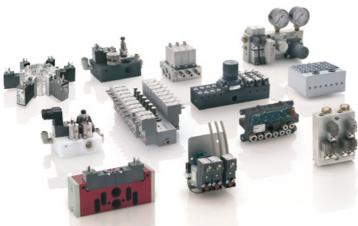
Life science fields of application

Devices and machines used in the medical and analytical sectors require lightweight and compact components with low energy consumption. Camozzi manufactures components that satisfy the requirements of life science in terms of performance, both material compatibility and specific legislation, such as dental and anaesthesia equipment, ventilators, dialysis equipment, oxygen therapy, hospital sterilisers, surgery equipment, and more.

Camozzi components

- Miniaturised solenoid valves with low power consumption along with fluid isolation are suitable for use in portable devices, such as pulmonary ventilators. Camozzi is one of the leading manufacturers of solenoid valves, with a wide range of products.
- Proportional solenoid valves can be used where a flow or pressure control is required. Cartridge or manifold design makes them particularly compact, thus they can be mounted directly near the workstation.







- Pressure regulators have been designed for use in all applications and equipment where it is necessary to insert the single component into customised integrated pneumatic circuits (manifolds) or collectors. The compact size allows the regulator to be plugged into a proper seat, making the installation easier and reducing the assembly time.
- Oxygen Fittings (OX1: Non volatile residue less than 550 mg/m²) All the components in a medical device must comply to strict requirements. OX1 fittings are ultrasonic cleaned, inspected with UV Black light and use materials fully compatible with oxygen.

Special solutions

Camozzi main goal is to be close to its customers throughout the world and it is through such partnerships that it provides quality components and custom systems in accordance with local regulations and standards. The company has broad experience in the development of a range of customised solutions for the control of liquid and gaseous fluids. These solutions combine miniaturised solenoid valves and other components to produce modern and functional design with high performance systems.

The Camozzi clean room

In order to guarantee the best quality in all production phases, Camozzi has created controlled atmosphere environments and an ISO 7 cleanroom for the assembly of products and for solutions that require cleanliness and the elimination of all organic and inorganic contaminants. Ultrasonic cleaning and inspection equipment make it possible to supply components that can be used with aggressive liquids and highly flammable gases like oxygen.



Name · Cicor Group

Address/P.O. Box • Gebenloostrasse 15
Postal Code/City • 9552 Bronschhofen

Country · Switzerland
Telephone · +41-71-91373-00
Fax · +41-71-91373-01

Email · info@cicor.com
Website · www.cicor.com

Social Media · y in 🗸

Number of Employees • 2,000 worldwide

Founded (year) · 1966

Areas of Activity • | Engineering and test engineering

| Printed circuit boards

| Thin-film and thick-film substrates

| Electronic manufacturing services

| Microelectronic assembly

| Box building

I Tool design and fabrication

| Plastic injection molding

∣3D-MID

| Printed electronics

Annual Turnover · CHF 254 m (2019)

Cicor Group – your technology partner

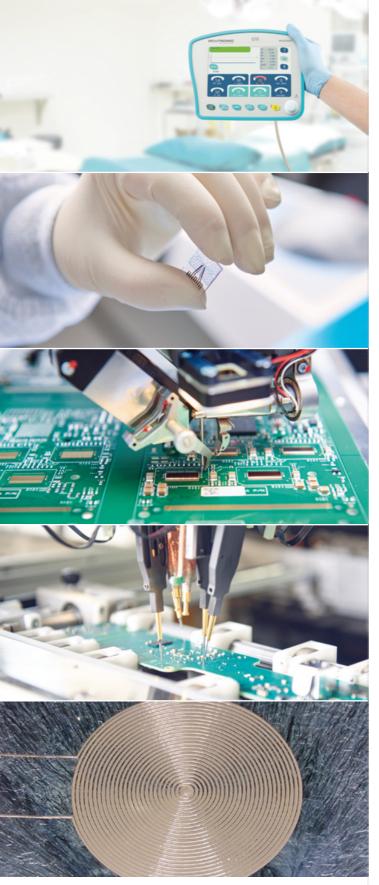
The Cicor Group is a globally active development and manufacturing partner with innovative technology solutions for the electronics industry. With about 2,000 employees at ten production sites, Cicor offers highly complex printed circuit boards, hybrid circuits and printed electronics as well as comprehensive electronic manufacturing services (EMS) including microelectronic assembly and plastic injection moulding.

Customised solutions

Cicor works together with customers to develop innovative products and offers solutions that meet the needs of the market, reflect the latest trends, and convince through their application. Cicor's broad portfolio of innovative technologies, services, and global production capacities offers the right solution for even the most demanding requirements, such as high-tech and highreliability applications. Thanks to a focus on consistent quality and maximum traceability, rapid prototyping. flexible choice of materials, miniaturisation, as well as development and assembly services, Cicor is able to meet the requirements for medical devices by using new ideas and cutting-edge solutions. Cicor supports its customers starting in the planning stage and provides the best outsourcing solution, tailored to the specific needs. Cicor is your technology partner over the entire product lifecycle, from product development through series production to after-sales service.

One-stop shop for electronics and precision plastics solutions

Cicor is an EMS provider with an international footprint and a broad range of production capabilities in printed circuit board assembly, system assembly and box building, control cabinet construction, cable assembly, and in the areas of tool design and fabrication as well as precision plastic injection moulding. Cicor offers complete outsourcing solutions for the development and manufacturing of complete electronic devices and systems. As a company with global operations in Switzerland, Germany, Romania, Singapore, Vietnam, Indonesia, and China, Cicor employs its synergies to offer solutions based on long-term know-how.



Innovative power through technological expertise

As a leading manufacturer of sophisticated microelectronics and high-quality substrates, Cicor is able to provide a broad range of products and services of the highest standards. In the area of microelectronics, Cicor offers state-of-the-art assembly and packaging technologies under clean room conditions. In the field of substrate manufacturing, Cicor is characterised by the production of highly complex rigid, rigid-flexible, and flexible printed circuit boards and substrates using thinand thick-film technology. Cicor works closely with its customers to develop and manufacture sophisticated products, ranging from prototypes to large-scale serial production. Cicor also offers a high degree of process stability, consistent top-quality, and absolute delivery reliability.

Sophisticated implants

Cicor manufactures complex circuits of various materials and realises ultrafine structures, which can be less than 0.02 mm thick despite having a high functional density. Using CiP (chip in polymer/plastic) technology, the overall thickness of chip packages can be reduced to between 60 and 100 µm. State-of-the-art technology makes it possible to manufacture multilayer circuits from biocompatible materials or stretchable components in conjunction with multilayer technology on flexible substrates.

Printed electronics

With the opening of a technology center for printed electronics in Bronschhofen, Cicor is able to offer innovative solutions in addition to proven technologies to its customers. Flexible additive manufacturing processes play a key role in substrate manufacturing and connection technology. The unique printing technology used by Cicor, enables a wide range of conductive, nonconductive and biocompatible materials to be printed on a wide range of substrates and forms.



Name · CONTACT Software

Address/P.O. Box · Wiener Strasse 1–3

Postal Code/City · 28359 Bremen

State · Bremen

Contact Person • Dr Regine Wolters
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Email · regine.wolters@contact-software.com

Website · www.contact-software.com

Social Media・むずin ベロ

Number of Employees · 301 (2019) Founded (year) · 1990

Areas of Activity • CONTACT is the leading vendor of open

standard software and is an open source pioneer for the product engineering process and the digital transformation.

Annual Turnover · €27.8m (2019)

Relevant R&D Budget • 25.6% (2019)

Make your engineering teams work better together

Medical technology is one of the most innovative industries worldwide – about one third of the turnover is achieved with product developments of the last three years! In addition to short innovation cycles, the growing interdisciplinarity, the high complexity from research and development processes, and increasingly strict regulatory requirements are among the special challenges. CIM Database Medical is an integrated industry solution for the special requirements of medical technology. It combines requirements, data, documents, projects, and processes and offers comprehensive validity and traceability in the entire development process with the principle of Single Source of Truth.

Reliable document management for maximum security

With its flexible folder and classification concept, CIM Database Medical Document Management provides a comprehensive classification system. Filing structures organise the entire documentation that is created during the product life cycle. This enables, for example, the fulfilment of the verification obligations specified by FDA 21 CFR and ISO 13485. Clear and easily adaptable inspection and approval workflows support smooth processes and ensure process quality and safety.

Accelerated release procedures and compliance-in-process

CONTACT Digital Signatures accelerates internal and external checking and approval procedures and makes them fully traceable. Any object, such as products, bills of materials, and documents can be digitally signed. The solution also supports the fulfilment of regulatory requirements (Electronic Records, FDA), ensures security, and protects against fraud. With investigations of cause and effect, corrective measures, and links to products and projects, medical technology manufacturers create transparency. CIM Database Medical supports companies in comprehensively fulfilling their documentation obligations as well as the requirements





CIM Database Medical Requirements Engineering Quality and Compliance Management dea and Technical Market Monitoring Re-certification Market Launch Regulatory

Project and Process Management

Product Data Management

Document Management





CONTACT SOFTWARE

regarding material conformity, for example, according to REACH and RoHS. The principle: Compliance in Process - thanks to automatically running documentation, the effort required to fulfil the obligation to provide evidence is significantly reduced.

Efficient management of requirements and approval

The FDA demands the complete recording and traceability of requirements as well as their implementation. The integrated requirements management guarantees this! All requirements - including regulatory ones such as those from the battery or packaging ordinance - can be stored as a library and in project templates and then used quickly and easily in any project.

CIM Database Medical also provides efficient process support for the approval of medical devices on the international market. Almost every country has its own approval procedures due to a lack of international harmonisation. With CIM Database Medical, medical device manufacturers can flexibly map the required test processes, test runs, and other measures to the respective national specifications using workflow designers and template libraries. This support from CIM Database Medical also applies to re-audit and re-certification processes.



Name · CONZE Informatik GmbH

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State · North-Rhine Westphalia

Contact Person · Magnus Theile

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Fax + +49 (2721) 60 07 78-80

Email · info@conze.com Website · http://conze.com

Social Media · in X

Number of Employees · 42

Founded (year) · 2009

Areas of Activity • | User Interface Engineering

| GUI Laver

| Desktop and Embedded Software Engineering

| Development and Prototyping

| C++, C#, .NET Framework/Core, WIN UI, MFC, WPF, UWP, Qt, ASP.NET Core, **Angular, React Native**

| CI-/CD tools like Build-Server and

Docker-Container

External • | University of Siegen

Collaborations | Brancheninitiative Gesundheitswirtschaft Südwestfalen

| Forum MedTech Pharma

Healthcare, your perfection. Software, our passion.

CONZE Informatik GmbH is a specialist for user interface engineering. For more than 10 years CONZE developed graphical user interfaces (GUI: HMIs = Human Machine Interfaces) for sophisticated devices and software systems. Its focus is on the areas of medical technology and healthcare. Thanks to years of experience and a high degree of academisation, the 42member team at the Lennestadt and Siegen locations knows what is important about controlling complex hardware with software.

CONZE operates as the digital workbench of its customers' HMI departments. It implements UI/UX concepts as well as visual designs as a professional graphical user interface of the customer's software. The result is a successful balancing act of technical feasibility, the greatest possible range of functions, highest performance, robust stability, and at the same time smooth operability of the software.

Competence from the digital workbench

As a well-established remote team, CONZE expands the workforce of its customers. On request, customers can increase their own team by using the CONZE pool of development, project lead, and project management:

- The development team contributes well-founded GUI and programming know-how.
- Their project lead controls and coordinates both its own team and, if desired, the customer's team throughout the entire project.
- The transparent, cost- and performance-optimised project management makes a clear statement about status quo, budget, and resources at any time within the project. It identifies bottlenecks or even risks at the earliest stage in order to react flexibly to changing requirements and actively presents an appropriate solution.

Thus, the team manages the daily balancing act between process-critical solutions in medical technology, userfriendly product design, and compliance with legal regu-



CONZE INFORMATIK



lations. This way of working allows the consistent development of international, market-ready software solutions of high quality according to the highest standards.

Quality management and safety

In order to guarantee and verify the high quality and safety standards of medical technology, CONZE's quality management is certified by TÜV Rheinland according to DIN EN ISO 9001:2015. In addition, CONZE complies with DIN EN ISO 13485:2016 (Medical devices - Quality management systems; Requirements for regulatory purposes), IEC 62304:2016 (Medical device software -Software life-cycle processes), DIN EN ISO 14971:2020 (Medical devices - Application of risk management to medical devices), and IEC 62366-1:2017 (Application of usability engineering to medical devices). The software specialists thus guarantee and verify their high quality and safety standards in medical technology.

The innovative strength of tomorrow

As a cooperation partner of the University of Siegen, CONZE is involved in the research of the Chairs of Life. Sciences, Medical Computer Science, and Human Computer Interaction. In this way, the international character of the research and the flow of knowledge are expanded in the long term.

Get in touch!

Benefit from experience and knowledge in the field of User Interface Engineering. Talk to the CONZE experts about your current or future software project.



Name · CSA Group

Address/P.O. Box · Weismüllerstrasse 45 Postal Code/City · 60314 Frankfurt am Main

State · Hesse

Contact Person · Marcel Lavèn

Telephone · +49-151-188-29-506

Email · Marcel.Laven@csagroup.org

Website · www.csagroup.org

Social Media · 🖒 🎔 in 🖸





Number of Employees · ca. 2,000 worldwide

Founded (year) · 1919

Areas of Activity • | Product Testing Inspection and

Certification

| Standards Development

| Global Market Access

About CSA Group

CSA Group is a global organisation dedicated to safety, social good, and sustainability. We are a leader in standards development and in the testing, inspection, and certification of products around the world including Canada, the U.S., Europe, and Asia.

Our areas of focus for testing, inspection, and certification services are the healthcare, industrial, home, and commercial industries.

Testing & certification services for the healthcare industry

Accredited as a National Certification Body (NCB) through the IECEE CB scheme and recognised by Authorities Having Jurisdiction (AHJ), we offer leading healthcare systems conformity assessment services. as well as testing and certification to leading international standards, such as IEC 60601-1, including the collateral standards and the applicable particular standards, and IEC 61010-1 with the applicable particular standards.

Our technical knowledge of medical electrical equipment and systems, and laboratory & measurement equipment, along with our knowledge of the compliance requirements in major world markets, work together to help you remove barriers to global market access.

CSA Group offers a comprehensive safety and compliance testing service offering. We offer testing and risk management evaluations throughout the product lifecycle and can offer tests for:

- Electrical safety
- Electromagnetic compatibility (EMC)
- Cybersecurity
- Interoperability
- · Wireless applications
- Global market access





Medical electrical equipment and systems

Medical electrical equipment and systems offer invaluable benefits but can also present great health and privacy risks through flawed design or malfunction. The experts at CSA Group can help you identify and resolve risks so you can safely and confidently go to market.

We provide standards, testing, and certification for a wide array of medical electrical equipment and systems, such as:

- CT Scanners
- Incubators
- Cardiac defibrillators
- Operating tables
- Lung ventilators

Laboratory & measurement

Take advantage of CSA Group's healthcare industry expertise to prepare your laboratory, control, and measurement equipment for the global market with fast and reliable services.

Laboratory and measurement equipment must meet demanding standards for precision and reliability. Trust CSA Group experts to help you identify and resolve flaws so you can confidently go to market.

We provide testing, certification, and standards solutions for a wide range of laboratory, control, and measurement equipment, such as:

- Centrifuges
- Autoclaves
- Mass Spectrometers
- In-vitro Diagnostic Equipment
- Multimeters



Name · DECKEL MAHO Seebach GmbH

Address/P.O. Box • Neue Straße 61
Postal Code/City • 99846 Seebach

State · Thuringia

Contact Person • Horst Lindner

Telephone • +49-151-52753-829

Email · Horst.lindner@dmgmori.com

Website · www.dmamori.com

Social Media · in /

Number of Employees · > 12,000 employees in DMG MORI group

Areas of Activity • | Machine tool engineering

I CNC machining (turning and milling)

| Surface machining of medical devices

High precision finishing of medical devices

| Additive manufacturing of medical components

I Holistic consulting in terms of medical industry

"We support our customer holistically and right from the start: From the first planning, support with certification questions, programming and production, up to quality management. And always specific for each customer." Horst Lindner.

Head of DMG MORI Medical Excellence Center

DMG MORI Medical Excellence Center

- Unique in the medical industry
- · Support in any phase of your business
- Interdisciplinary experts consult our customers direct from the start of every request
- Overall competence transfer with other Technology Excellence Centers, e.g. cooperation with experts in the field of additive manufacturing
- Holistic expertise in all areas of medical industry, from implants (e.g. screws, joints, bone plates) and prostheses (e.g. hand, knee, lower leg, or foot prostheses) up to instruments (e.g. scissors, forceps, navigation instruments) as well as medical devices (e.g. components for magnetic resonance imaging)

Solution provider for the medical industry

- Perfect coordination between machines, tools, fixtures, and machining strategies
- Holistic technology solution and holistic process chain from additive manufacturing up to the final machining
- Comprehensive know-how in the standardisation of processes and production requirements of products,
 e.g. machining of hard-to-machine materials like magnesium, titan, and CoCr
- Holistic knowledge of regulatory demand and legal basics regarding the medical industry
- Intensive consultations for turnkey projects from the first idea to the final installation



DECKEL MAHO SEEBACH





DMG MORI

DMG MORI AKTIENGESELLSCHAFT is a worldwide leading manufacturer of machine tools. With dynamic and excellence we advance future technologies. Our portfolio comprises turning and milling machines, the Advanced Technologies Ultrasonic, Lasertec, and Additive Manufacturing as well as consistent automation and digitisation solutions. Our modular products allow quick, easy, and scalable access to digital manufacturing and integrated digisation along the entire process chain - from planning and preparatory work to production and monitoring to service.

Our technology excellence is bundled within the main sectors of "Aerospace", "Automotive", "Die & Mould", and "Medical". Our partner programme "DMG MORI Qualified Products" (DMQP) allows us to offer perfectly matched peripheral products from a single source. Our customer-focussed services covering the entire life cycle of a machine tool include training, repair, maintenance, and spare parts service. The modern customer portal "my DMG MORI" digitises service processes.

With 154 sales and service locations - including 14 production plants - we are present worldwide and deliver to more than 100.000 customers from 42 industries in 79 countries.



Name · Diener AG Precision Machining

Address/P.O. Box · Stationsstrasse 66
Postal Code/City · 8424 Embrach
Country · Switzerland

Contact Person • Maurizio Zaugg (COO)
Telephone • +41-44-86633-02

Email · maurizio.zaugg@diener-ag.com

Website · www.diener-ag.com

Number of Employees • 200 Founded (year) • 1955

Areas of Activity $\,\cdot\,\,$ | Contract manufacturer for medical

implants, instruments, tools, and

accessories

I Industrialisation and manufacturing of gear and piston pumps for medical, diagnostic, and analytic application

Development support and test service

Annual Turnover • CHF40m Relevant R&D Budget • CHF3m

External • Part of the Acrotec Group
Collaborations Member of:

Swiss MedTech Swissmechanic

Precision machining for medical applications

Since 1955, we have been an owner-managed and financially independent company specialised in the contract manufacturing and assembling of medical technology, precision machining, and industrialisation of gear and piston pumps. In 2019 we joined the Acrotec group, an independent group of professionals specialised in micromechanics precision. The group serves different industries and is organised in three distinct divisions: watchmaking, medtech, and precision high-tech. Thanks to our many years of experience, we can provide our customers very competent support throughout the entire value stream and in full accordance with the ISO 13485 Standard. The know-how and degree of specialisation of Diener AG Precision Machining ensure that we are able to fulfil the highest standards and requirements for precision, traceability, critical finishing in a cleanroom environment, and comprehensive documentation for the customer. With our 200 well-educated, permanently trained. and highly motivated employees we offer our partners and customers a large selection of technologies and a wealth of experience in processing complex medical applications on a wide range of different materials. We can also establish individual manufacturing processes as per your requirements, beginning from Design for Manufacturing (DFM) up to inventory management and logistics for you or your customers. Due to the strong support of our group and our competent engineers, we can manage your project as a general contractor.

Vision

We are a strong supplier of complex and challenging precision parts at a technologically advanced level for several major, global medtech companies, as well as an efficient manufacturer of premium gear and piston pumps for high-tech markets.

Mission

- · Customer-focused orientation
- · Comprehensive range of solutions
- · Value creation through innovation
- Operational and environmental excellence
- Diverse and entrepreneurial employees













Our Services

Our professional services are comprehensive.

Upon request, we support our customers in the development phase: from the idea to the packaging.

Our customers and their requirements are our focus.

We precisely identify expectations and requirements in order to fulfil them efficiently.

In addition to all statutory requirements for the product, we also take into account the legal and regulatory provisions that are necessary for the safe use of the product.

Our decision-making processes are short; this enables us to quickly adapt to the situation and to fulfil the specific requirements of our customers.

Range of service

- Support in planning, design, and production engineer-
- Complex inspection and certification according to customer needs or required standards
- 3D, CMM, and Optical measurement systems
- Multi-axis turning, milling
- Laser marking
- Surface treatment, cleaning, finishing
- Assembly, test, and inspection of sub-assemblies and assemblies
- Labelling, packaging
- Cleanroom service

Our Quality Promise

With us everything is about precision:

- We keep deadlines, quality, and costs under control throughout the value stream.
- Quality management system according to EN ISO 13485
- Safe test data through statistical process controls (SPC)
- Applying 21 CFR 820 Code of Federal Regulations
- Qualified facilities and machines (DQ, IQ, OQ) and validated special processes (PQ)
- Customer-specific tests integrated in the inspection planning tool IQS
- Well-trained and educated employees with consistent training records



Name · EPflex Feinwerktechnik GmbH

Address/P.O. Box • Im Schwöllbogen 24
Postal Code/City • 72581 Dettingen

State • Baden-Wuerttemberg

Contact Person • Georg Uihlein
Telephone • +49-7123-9784-0
Fax • +49-7123-9784-66
Website • www.epflex.com

Social Media · 🖒 in 🗸

Number of Employees · 380 Founded (year) · 1994

Areas of Activity • Metallic components for minimally invasive medicine

Annual Turnover · €32m

EPflex - better ideas, better health

We are one of the pioneers in the development and manufacture of metallic components for minimally invasive medicine.

Over the years, we have repeatedly developed solutions that have opened up completely new, previously unimagined possibilities for diagnosis and treatment. These include, among others, the world's first MRI-compatible guidewire.

Our products are high-tech precision instruments, developed and manufactured on the basis of unique know-how and years of experience, with the aim of delivering consistently high quality.

Guide wires

Our guide wires are high-tech instruments, manufactured and developed on the basis of years of experience and outstanding expertise. We offer a wide range of stainless steel and Nitinol guide wires for a wide variety of applications – tailored to your requirements.

Nitinol stone retrieval devices

EPflex stone retrieval devices are manufactured with the highest precision and guarantee the best quality when using Nitinol. This makes us the perfect solution for urological and gastroenterological procedures.

Snares

Our snares are made of Nitinol, a superelastic nickeltitanium alloy. This ensures that the sling always returns to its original shape. Due to the use of Nitinol, our snares are particularly resistant to buckling and deformation. Snares can be equipped with a gold-coated head in order to provide enhanced radiopacity.

Stylets

EPflex stylets are manufactured individually according to your requirements. Whether ground or unpolished, coated or uncoated, we can use a large stainless steel and Nitinol wire bearing for this purpose.

FPFI FX FFINWFRKTFCHNIK



Our products and components are packaged in a clean room. We make sure that the safety and highest hygiene requirements are always met.

Manufacturing competencies

- Grinding
- Laser welding
- Gluing
- Wire forming
- Shrinking
- Electrolytic marking
- Laser marking
- Sandblasting
- Coating

The medical disciplines

- Urology
- Gastroenterology
- Interventional cardiology
- Peripheral angioplasty and other minimally invasive procedures

Quality right from the start

We use high-quality materials, such as medical grade stainless steel or Nitinol, platinum, tungsten, and special polymers for our guide wires.

Our solutions and products are perfectly tailored to the individual needs and requirements of our customers. We are equipped with state-of-the-art technologies and production facilities. Our employees are specially trained and pay attention to even the smallest details with the highest precision. Particularly complex work steps are carried out by our experts by hand. Furthermore, we are DIN FN ISO 13485 certified.

In addition to our high-quality basic product range, we offer the opportunity to develop and implement customised solutions that are perfectly adapted to the respective specific requirements - down to the last detail. We are looking forward to hearing from you!



ERGOSURG

MECHATRONICS AND MEDICAL SOLUTIONS

Name · Ergosurg GmbH

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State · Bavaria

Telephone • +49-89-322-094-62

Fax · +49-89-322-094-66

Email • info@ergosurg.com

Website · www.ergosurg.com

Number of Employees · <50 Founded (year) · 2006

Areas of Activity • | Medical technology

| Robotics

Annual Turnover · < €50m

Company profile

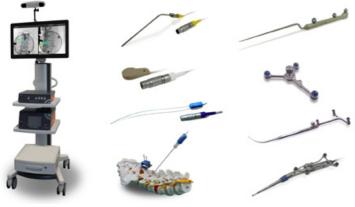
ERGOSURG has been working on behalf of market leaders for 20 years. ERGOSURG develops technology, approves it as medical devices, organises clinical studies, and produces medical devices as an OEM manufacturer. Besides image processing, vision, machine learning/deep learning, and augmented reality, ERGOSURG has been producing navigation technology and robotic systems for clinical use for 20 years. Our products are used in neurosurgery, spine surgery, ENT surgery and CMF surgery, dental implantology, and soon in intravascular cardiology, heart surgery, and interventional radiology. There are also devices for veterinary medicine. ERGOSURG supplies CE-certified and on request also FDA-certified devices. Please contact us.

Electromagnetic and optical navigation systems

The high performance electromagnetic surgical navigation system uses wired instruments with integrated sensitive micro coils which are measured in position and orientation with high precision in an alternating electromagnetic field. The sophisticated optical surgical navigation system measures the position and orientation of the instruments through infrared light which is reflected from our patented and unique glass reflectors mounted on the instruments. These two methods allow a precise real-time representation of the instruments relative to the patient in intra- and preoperative medical images. The electromagnetic system has the advantage that flexible instruments can be navigated and no line of sight to an optical system is required, so the surgeon can move freely in the surgical area without obstructing the measurement. The optical system, however, can navigate active instruments such as milling machines or RF knives without any loss of accuracy, and no wiring of the instruments is required.

Both systems, the electromagnetic and the optical, can be combined with any equipment trolley or endoscopy tower and can be connected to the clinic network for data exchange. Thus, the systems can be integrated easily into any operating room.





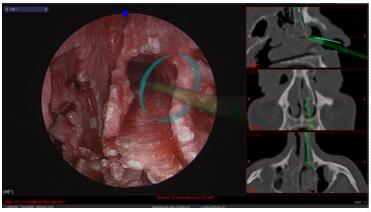
NAVIGATION-SYSTEM WITH INSTRUMENTS (EM/OPTICAL)



CARDIAC NAVIGATION AND ROBOTICS



AUGMENTED REALITY AND 3D ENDOSCOPY



All instruments can be designed to be autoclavable and reusable, eliminating special costs and additional waste from disposable devices.

Robotics

ERGOSURG has offered robotic technology as a component of medical devices for many years. Modern design and production techniques allow us to integrate customer-specific robot components into your product at very low cost, including disposable robots. We automate movements of catheters in the body as well as endoscopes or cameras in the operating room. Ideally, these procedures are coupled with our navigation technology and augmented reality.

Planning and navigation software

Interventions have to be performed efficiently and in short succession. A surgical navigation system must therefore be easy to use, intuitively understandable in the respective national language, and with a short preparation time. Safety features such as distance measurements from risk structures or the deactivation of active instruments prior to contact with risk structures are just as self-evident as convenient intervention planning and documentation. In order to fulfil these tasks, we develop customer-specific surgical navigation systems for different medical fields with an ergonomic user interface and efficient workflow.

Augmented reality and 3D endoscopy

The most important source of orientation for many surgeons is the video endoscope. Its real-time video images are the basis for all instrument movements during the procedure. It therefore makes sense to visualise surgical information like risk structures, instruments in the vicinity of the endoscope, or the planned access path in the realtime video images of the endoscope. The augmented reality navigation can be used with a 3D endoscope to enhance the impression of optical depth.

For further information please visit us at www.ergosurg.com

or at the MedtecLive 2021, Nuremberg, Germany.



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Website · www.etogruppe.com

Social Media • 3

Number of Employees • 2,300 worldwide

Founded (year) · 1948

Areas of Activity • | Medical technology

| Industry

| Passenger cars and commercial vehicles

Annual Turnover • €400m Relevant R&D Budget · €21m

Collaborations

External · Numerous projects with recommended customers, different universities, and research institutes.

ETO – THE HEART OF MOTION

Since 1948 ETO GRUPPE has developed, produced, and delivered innovative valves, actuators, sensors, and integrated modules to customers all over the world. Our products are the impulse generators in the customers' systems, the heart of the machine, so to speak. They can be found wherever highly dynamic processes take place and improve safety or efficiency as well as environmental compatibility. In medical technology our products have been providing precise dosing of fluids for leading device manufacturers for more than 30 years.

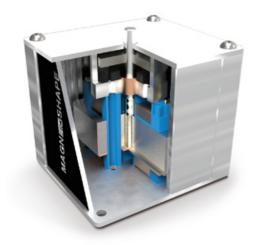
Innovative solutions for our customers

Every year, we invest approximately 6 percent of our revenue in research and development, which results in successfully developing new approaches over and over again. Our high number of patents is further proof of the unlimited innovative strength of ETO GRUPPE. For example, our engineers developed MAGNETOSHAPE®, a pioneering technology on the basis of magnetic crystals that change their shape, which is utilized in completely energy-efficient applications such as next-generation actuators. This is not only regarding commercially feasible techniques, but also the conscious predevelopment of the applications of the future.

Sophisticated processes for highest quality

ETO produces according to the highest quality standards because of the high requirements of the medical technology industry and especially because of the high standards we set for ourselves. Our production locations are certified according to common quality management systems as well as standards specifically for the automotive industry. We produce products by the millions in fully automated high-tech facilities. In the event that our customers require smaller quantities, we produce at optimal costs in partially automated production to the highest quality standards.











Our employees make the difference

The basis of our top-quality innovations is our employees, approximately 2,300 globally. Our 8 sites located in Germany, Poland, USA, China, India, and Mexico, deliver the highest performance in their areas and are strategically close to the customer. Globally, more than 200 engineers are working daily to further develop our products and optimize our production processes while repeatedly setting new benchmarks. Continuous training as well as the regular exchange with universities and research institutes guarantee the latest in innovation with state-of-the-art technology.

Proven lifesaver solenoid valve for dialysis technology

For more than 30 years ETO actuators have reliably provided precise dosing in dialysis machines. They control the dosage of the dialysate at the balance chamber and guide the different media flows for patient treatment, hot cleansing, and the chemical cleansing phase. The long service life allows for a maintenance-free operation of dialysis machines over many years.

Innovations in medical technology

We are currently expanding our product portfolio under the trademark ETO HUMEDIC. In addition to pressure sensors, proportional valves and hose-pinch valves complete our range of products. Our pioneering product innovations guarantee longer service life and provide reduced energy consumption. This results in lower temperatures and a careful use of resources while significantly lowering the total operation costs of the devices.



Name · Eurofins Medical Device Testing

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State · Bavaria

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Email · mdsales@eurofins.com

Website • www.eurofins.com/medical-devices

Number of Employees • ca. 380 Founded (year) • 1984

Areas of Activity · Medical Device Testing

Comprehensive testing services for medical devices

From implants and instruments to single-use and combination products, as well as active electronic devices, Eurofins Medical Device Testing provides the optimal strategy for all types of medical devices and delivers rapid turnaround times with the highest level of service and most advanced technologies.

With extensive knowledge of the commercialisation processes, regulatory requirements, and scientific trends in the medical device industry, our scientists and engineers have been assisting companies, large and small, with developmental testing and regulatory submissions for three decades.

Our 20+ state-of-the-art facilities throughout North America, Europe, and Asia Pacific offer extensive capacities and the highest level of instrument technology, enabling us to provide the full scope of testing services required by the medical device industry.

Eurofins Medical Device Testing can help to develop and execute your test plans and navigate the regulatory pathway to market anywhere in the world. Our laboratories maintain quality systems compliant with cGMP, GLP, and ISO 17025, and conduct testing in accordance with ISO, ASTM, ANSI, AAMI, USP, EP, and JP standards, as well as custom test methodologies to meet the unique needs of our customers.

Chemical/Physical Analysis

- Extractables & Leachables
- Material & Product Stability
- Dissolution
- Raw Materials Purity
- · Particle Characterisation
- · Residual Ethylene Oxide

Microbiology & Sterility

- · Sterility / Sterility Validations
- · Bioburden / Bioburden Validations
- Endotoxins / Endotoxin Validations
- · Antimicrobials / Infection Control
- Cleaning & Reprocessing Validations
- Bacterial Identification
- · Customised Test Designs







EUROFINS MEDICAL DEVICE TESTING

Packaging Validation & Seal Integrity

- Container Closure Integrity Tests
- Sterile Barrier
- Package & Transit Testing
- Shelf Life & Accelerated Aging / Real Time Aging
- Label Durability

Biocompatibility Testing

- Cytotoxicity
- Hemocompatibility
- Genotoxicity
- Irritation
- Sensitisation
- Systemic Toxicity
- Implantation (standard, customised, functional)
- **Degradation Studies**

Chemical Characterisation

- GCMS +/- Headspace, ICP, LCMS, FTIR
- Toxicological Risk Assessment
- **Expert Evaluation**
- Inclusion of AFT

Combination Products

- Drug Release and Dissolution
- **Chemical Compatibility**
- Stability
- Container & Closure Integrity
- Syringe Testing

Mechanical Implant Testing

- Material Tests, i.e. Physical Testing (Compression, Tension, Shear)
- · Characterisation of Coatings
- Particle Analysis and Ion Release Tests
- Corrosion Testing
- Finite Element Analysis

Notified Body Services

CE Certification

Training & Consulting

- **Expert Statements and Risk Evaluation**
- Seminars, Webinars, Trainings

FAULHABER

Name · FAULHABER Drive Systems

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State · Baden-Wuerttemberg

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Social Media · in D

Number of Employees · 2.100 Founded (year) · 1947

Areas of Activity • | Medical & Laboratory Equipment

| Optics & Photonics

| Camera, Audio & Data

| Factory Automation & Robotics

| Precision Monitoring & Measuring

I Industrial Tools & Equipment

| Aerospace & Aviation

| Environmental & Safety

| Modelling & Prototyping

Rising to the challenge

FAULHABER develops and delivers key components with its drive systems for medical applications that are used in the fight against COVID-19. In addition to the high standards of EN ISO 9001 and 14001, FAULHABER is also certified for medical products acc. to EN ISO 13485.

Ventilation systems

For the manufacturers of ventilators, the controllability of the speed, the low level of vibration, and quiet running, as well as the reliable and low-maintenance operation, play an important role in air flow control. Brushless DCservomotors and DC-micromotors with graphite commutation satisfy these requirements especially well. At the same time, they offer high dynamics, and high speeds can be achieved thanks to their low inertia.

Personal protective equipment (PAPR)

Because the coronaviruses are spread by droplet infection, respiratory protection plays an important role in personal protective equipment. Closed PAPR systems (Powered Air-Purifying Respirator) provide very effective protection for medical personnel. Drives that are suitable for this application must be powerful but also especially light and compact for mobile use and should function as efficiently as possible in battery operation. The FAULHABER BXT flat motors are a good choice. DC-micromotors with precious metal commutation are also suited for this application area.

Laboratory automation

An important part in the fight against COVID-19 is the expansion of testing capacities. This is very complex, therefore there is no getting around automated laboratories with high throughput. Small servo drives for lateral and rotational positioning are very often needed in the analysis devices. With these drives, high dynamics and precision are especially important. FAULHABER DC-micromotors and bell-type armature motors with integrated encoders satisfy these demands during continuous use in medical test laboratories.





Point-of-care (PoC) analysis

If test results need to be available promptly so that decisions based on laboratory values can be quickly made in, e.g., intensive care units, outpatient departments, or doctors' practices, so-called point-of-care tests are required. These are used to measure parameters on site, such as cardiac enzymes and blood values, or can be used with PCR to verify pathogens such as SARS-CoV-2 on swabs. The corresponding analysis devices are nearly fully automated. Drives for this application must be as compact as possible yet still be reliable and fast. DC-micromotors with graphite or precious metal commutation are therefore a good choice here as well, as are stepper motors.

Infrared thermometry

As a contactless and mobile method for recording the body temperature, e.g., at borders or in airports, infrared thermometry is common around the world. In mobile measurement devices, stepper motors have proven themselves for supporting the infrared cameras during swivel and tilt adjustment, zoom, focus, or for shutter control during calibration. They position very precisely without encoders, making it possible to realise positioning drives cost-effectively. At the same time, they enable extremely rapid direction changes when focusing. The small drives from Schönaich once again prove that they are advancing technology in medicine, research, and laboratories for the common good.

Award-winning innovation

FAULHABER has won several prestigious awards. In 2018, the company received the Factory of the Year award in the category "Excellent Small Series Assembly". In 2019, Dr. Fritz Faulhaber GmbH & Co. KG made first place in the innovation ranking of the German magazine WirtschaftsWoche and in 2020 the drive system specialist was selected, for the fourth time, for its innovation success to be part of TOP100, Germany's most innovative small and medium-sized companies.

FESTO

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Social Media · 🖒 🛩 in 🗸 🗅

Number of Employees • 21,000 (2019)

Founded (year) · 1925

Areas of Activity • | Automotive sector

I Food and packaging industries

| Electronics and assembly

| Biotech

| Pharmaceuticals and cosmetics

| Medical engineering and laboratory

automation

| Chemical industry and water

treatment

Annual Turnover • €3.07bn (2019)

Relevant R&D Budget • 8% of the turnover

The Festo Group

Festo is both a global player and an independent familyowned company based in Esslingen am Neckar, Germany. The company has become the global market leader in its sector over the past 60 years thanks to its innovations and problem-solving competency, as well as a unique range of industrial training and vocational education programmes. Since 2004, Festo has been developing components and system solutions for equipment manufacturers who specialise in the automation of laboratory processes and the manufacture of medical devices.

Due to its annual double-digit growth rate, the LifeTech business area has been a separate division of Festo since 2015 and is being continuously expanded. Since the United States is at the forefront of the global life sciences market, it is there that most industry-relevant innovations and new technologies emerge. In order to participate in these developments at an early stage, Festo began setting up a development centre in Boston at the end of 2017.

In addition to standard components, the LifeTech division develops separate components with new technologies that are designed specifically for the Life Sciences market. In the development of customised automation solutions for its customers, Festo's approach involves the joint development of engineering concepts together with the customer, beginning already with the very first planning phase.

Ready-to-install solutions for in vitro diagnostics

A highlight this year is ready-to-install solutions for in vitro diagnostics in the field of Point of Care Testing (POCT). Compact analysis instruments make quick testing possible at the doctor's office in order to identify the pathogen responsible for a cold or flu, as well as other bacterial or viral infections. Particularly for this type of equipment, Festo offers ready-to-install automation solutions including customised engineering.





Product range for laboratory automation

Festo develops intelligent, tested subsystems for the automation of liquid media and sample handling applications.

The focus is on:

- Feeding and identification of test tubes
- Opening and closing of test tubes
- Feeding of liquid media and solids

The applications involve the use of both electric and pneumatic actuators with motors, controllers, and handling systems, as well as grippers, sensors and camera systems.

One example is the VYKA, a new media-separated solenoid valve for precise dispensing of liquids or control of liquid flows in manifold duct plates. A current-controlled solenoid permits highly precise and reliable operation. Media separation ensures the highest possible safety standards and chemical resistance. For higher flow rates the VYKB is used.

Product range for medical technology

In the field of medical technology, Festo develops products and subsystems for medical devices.

Attention is focused on efficient open- and closed-loop control of medical gases, for example:

- Flow control with compact valves for ventilation and anaesthesia devices
- Pneumatic integration solutions for surgical devices
- Closed-loop control of fluids in dental stations

The lightweight, compact proportional solenoid valve VPWS is new to the market. It's predestined for use in applications with minimal installation space, for example in ventilator breathing and anaesthetic systems where respiratory gases need to be mixed with oxygen. But it's also suitable for dental drills and other surgical instruments which are operated with compressed air - wherever the flow of gas has to be accurately regulated.

Festo medical technology: www.festo.com/medtech Festo laboratory automation: www.festo.com/lab Regular news on our LifeTech Blog: www.festo.blog



Name • FOBA Laser Marking + Engraving (Alltec GmbH)

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(Global Vertical Manager Medical)

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Email · info@fobalaser.com Website · www.fobalaser.com



Number of Employees · 250 (worldwide)

Founded (year) • 1969 (FOBA), 1985 (Alltec GmbH)

Areas of Activity • | Development and manufacturing of innovative laser marking and engraving solutions

> | Laser marking workstations and laser marking systems for OEM and integrators

| Vision-inspection systems for part validation, automated mark alignment, pre- and post-mark code validation

| Specialist for customised medical device UDI-marking solutions

Collaborations

External • | Medical Mountains

| Technology Mountains

I GS1 Germany Solution Partner

| HIBC Approved Solution Provider

| VDMA Working Group Medical **Technology**

| T4M Messebeirat (trade show organization council)

Member of



Reliable laser direct part marking for product safety and traceability

FOBA offers laser marking workstations or systems for the integration into production lines, as well as semi or fully automated workflows. Our marking solutions are specifically developed to fulfil the requirements of UDI direct part marking and help to achieve a higher throughput. FOBA's innovative fibre laser, UV-, or CO₂-laser marking systems are available with sophisticated vision inspection and software features to enable an error-free, automated, and safe laser marking process.

Besides UDI there are various marking applications such as banding marks on hypodermic needles, micro codes on tiny pedicle screws, symbols on sensitive plastic material, 2D-codes on hospital equipment, or marks on metals that undergo multiple sterilisation processes. For each material and its individual functionality the appropriate marking parameters must be determined.

FOBA understands laser marking as a comprehensive process. This means not only the three-step marking process itself, with pre-mark inspection, automated mark alignment, and post-mark validation. It already starts beforehand with application and documentation consulting and additionally includes full-service maintenance programmes such as technical support and training or spare parts and remote service.

UDI – increasing legal and formal requirements

UDI (Unique Device Identification) codes must be machine/human readable in order to be obtained directly from the product and transferred further. Also according to legal requirements codes must be indelible and readable throughout the entire product life cycle. Laser marking, if applied accordingly, can guarantee sustainable marks on nearly all kinds of material.

To be compliant with legal UDI guidelines, manufacturers also need to perform extensive documentation and validation of their products, equipment, and processes. To facilitate these qualification efforts FOBA provides IQ-OQ-PQ-MQ support.



Marking and engraving experience since 1969

With decades of experience, FOBA is among the international market and technology leaders in manufacturing and supplying innovative marking and engraving laser systems. FOBA offers laser components, laser marking workstations, and high-precision laser engraving machines.

Founded as a mould construction and engraving plant in 1969, FOBA established its first laser technology division in 1991. Since 2009, when FOBA was merged with Alltec GmbH, the brand name FOBA has become a strong international distribution and service label. FOBA is headquartered in Germany and belongs to the US-based Danaher Corp.

A unique vision solution without product fixtures

FOBA's high-speed camera system IMP (Intelligent Mark Positioning) is integrated in the laser's marking head. It detects work pieces and their positions and aligns the marking accordingly. Additionally, the mark content can be aligned to match the part and, finally, the marking results can be validated.

FOBA MOSAIC is the latest innovation that further streamlines production processes by enabling marking without fixtures. Parts do not have to be pre-oriented or placed in a predefined position but will be marked accordingly. Fixtureless laser marking eliminates the associated overhead cost, allows immediate product change, and dramatically minimises human intervention.

FOBA's medical device marking solutions help solve the current challenges of medical device manufacturers. Our experienced application engineers are specialised in achieving excellent marking results in UDI marking.

For more information contact info@fobalaser.com

FRIWO

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www.friwo-shop.com





Number of Employees · 2,600 Founded (year) · 1971

Areas of Activity • | Power Supplies

| Chargers | Battery Packs

| LED Drivers | Motor Control Units

| Drive Systems

Annual Turnover · €100m

Medical power supplies: the heart of your application

Heart failure - one of the most dreaded incidents in medicine. If the heart fails, so does everything else. The same applies to your application's power supply: if its service diminishes, the entire system will be affected - which can be disastrous in medical technology.

It is therefore of utmost importance to have a reliable partner for power supplies. We want to meet this need: ever since the invention of the world's first plug-in power supply in 1971, our customers have been relying on our expertise, since we have already manufactured more than one billion power solutions. 50 years of knowhow and our German engineering skills safeguard the delivery reliability of your application - and thus the maximum safety of the patient.

One-stop-shop for power supply and drive system solutions

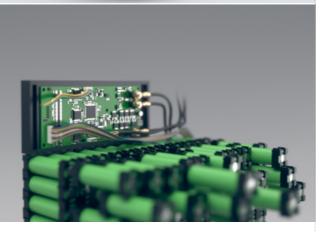
Today FRIWO is an international manufacturer of stateof-the-art chargers, battery packs, power supply units, and LED drivers. In addition, the company acts as a system provider and supplies digitally controllable drive solutions from a single source. The product range includes all components required for a modern electric drive train: from the display and engine control to the battery, charger, and control software.

Innovative solutions for the toughest requirements

FRIWO's medical power supply solutions are designed for the most demanding conditions. Whether it is about surviving falls during hectic emergency treatment with a patented encapsulation technique, protecting the patient with minimal leakage currents from \leq 10 μ A, or securing the power supply with redundant systems and battery-operated backup solutions: FRIWO develops and manufactures reliable power supplies.







We always think from the user's point of view and develop innovative concepts to make everyday medical life easier. In the field of inductive charging technology, for example, we already offer contactless energy solutions with up to 150 W transmission power and parallel data communication. The use of inductive charging technology enables the development of medical devices with completely closed housings - an invaluable advantage for sterile workplaces!

FRIWO always develops and produces taking into account possible future changes in standards and increasing efficiency requirements in order to ensure smooth and long-term marketing of your product. FRIWO is also at your side as a reliable partner for new legal regulations such as the Medical Device Regulation (MDR) 2020.

Global network for maximum flexibility

Thanks to our competent global network, customer requirements and wishes can be flexibly implemented. With modern engineering and production centres in Germany and Vietnam, as well as sales offices in Europe, Asia, and North America, we are present in all important markets of the world.

ISO 13485 certification as an additional quality promise

In particular, certification according to ISO13485 is an additional quality promise for medical technology, as it defines regulatory requirements for a comprehensive management system of medical device manufacturers. As an internationally recognised standard, this regulation contains guidelines for design and development, production, installation, maintenance, and sales. This certification places high demands on the exact adherence to all process steps. Particular attention is paid to risk management and consistent and complete documentation; not only with regard to minimising risks, but also with regard to optimum traceability of products and components.

GEORGII KOBOLD

Creating Motion since 1924

Name · GEORGII KOBOLD GmbH & Co. KG

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State · Baden-Wuerttemberg

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 $\textbf{Email} ~ \cdot ~ \textbf{andreas.vonderschmidt@} \\$

georgii-kobold.de

Website · www.georgii-kobold.de

Social Media · in 🔏 🗅

Number of Employees • 100

Founded (year) · 1924

Areas of Activity • Medical Technology

Food&Pharma Automation

Annual Turnover • €12.5m Relevant R&D Budget • €1.5m

Drive solutions for Medical and Laboratory Technology

As individual as each medical or laboratory device is, in the end it is always about the human being and his or her health. When it comes to the equipment and its components, special criteria will always apply. GEORGII KOBOLD has the know-how to provide very specialised and reliable components in the fields of mechanical and electronic drives.

Since 1924, GEORGII KOBOLD in Horb, has been synonymous with electro-mechanical drive technology. The 100 well-qualified staff focus on customer-specific solutions for manufacturing gears, motors, and drive electronics for technically demanding applications. Compliance with European production standards and the fulfillment of all product standards (e.g. IEC 60034, etc.) is just as much a matter of course as the integration of components that meet the special safety requirements (SIL2, SIL3).

Many series are already internationally certified. In principle, we have designed all products to be UL/CSA compliant – if this has not already been completed, they can all be certified as needed.

Heavyweights - precisely positioned

In imaging procedures, such as MRI and X-rays, the examination results depend, among other things, on precise positioning and the maximum freedom of movement of the devices. This is exactly where GEORGII KOBOLD motors are in operation. Thanks to their compact design, high power density, and quiet operation, they are typically integrated into tight spaces.

The goal - reliable results

Our motors and drives also play an important role in modern laboratory diagnostics. They are optimally adapted for medical use and fulfil the important prerequisites for obtaining high-quality laboratory results: they work precisely and run extremely quietly with a minimum operating temperature.



GEORGII KOBOLD



Safety first

This is particularly true in the field of surgical microscopy and robotics, where GEORGII KOBOLD motors and drives transfer human hand movements into tiny movements and where particularly high safety requirements apply. From coarse to fine positioning, our drive solutions ensure smooth motion sequences with minimum effort and thus support the high-precision work of the surgeon.

Centralised or decentralised control?

It depends on the circumstances. Control and regulation technology installed separately from the motors can be one of the best solutions for certain applications; however, decentralised drive concepts, e.g. in robotic visualisation systems, can also have a clear advantage. In this case, we integrate the drive controller and the logic unit directly into the Smart Drives; this minimises the need for cabling to the control cabinet as well as the overall installation efforts. Additionally, the total weight of the drive train and the complexity of the connections are reduced. GEORGII KOBOLD drive solutions support both superstructures. Let's talk about it!

From conception to the finished product

In the field of medical technology, traceability in production is an important criterion. At GEORGII KOBOLD, all steps in the motor production are carried out in-house - from development to stamping, casting, winding, assembly, and painting. Obviously, a large part of the responsibility for adding value remains in-house. Traceability processes and in-process testing are immediately and continually carried out. In addition to a mature and sophisticated quality management system, we implement a 100% final inspection, which ensures a flawless product.

CAPA processes guarantee continuous learning from experience.

Learning, research, development, and high-quality production: this is how quality is created - Made in The Black Forest.



Name • H. + H. Maslanka Chirurgische Instrumente GmbH

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Social Media · in

Number of Employees • 50

Founded (year) · 1974

Areas of Activity · Medical products

Since 1974, H. + H. Maslanka Chirurgische Instrumente GmbH has been known for its high-quality endoscopy equipment. Thanks to our comprehensive portfolio, we offer a wide range of products and cover a vast area of the field of endoscopy. Optimal product quality and high environmental sustainability are the guiding principles of our company. We are also substantially involved in various innovation and development projects in the field of research, and have been granted several patents.

Our top priority for all of our products is to ensure a high level of safety in application, not least by constant processing at the highest level. State-of-the-art production facilities and trained professional staff support us in carrying out precise, top-quality production processes. The medical equipment that we produce therefore guarantees an invaluable level of safety to be reached, particularly in the field of endoscopic surgery.

Focus on efficiency

As a Tuttlingen-based family company, we strictly comply with the needs of both doctors and patients. Short reaction times come just as naturally to us as the flexibility to adapt customisable products to individual requirements. In addition to other medical technicians and pharmaceutical companies, our customers mainly include clinics and doctors' surgeries in both the OEM and private label sectors. The focus of our product range is on the field of *flexible endotherapy*. As a German medical technology company, we specialise in high-quality medical instruments, as well as equipment for a minimally invasive and flexible endoscopy procedure.





Philosophy

Medically effective, extremely safe, and very gentle patient care is a prerequisite for the development of every Maslanka product. Maslanka therefore places great importance on excellent processing, and functions with absolute reliability. This is the only way that we can meet our demand for maximum efficiency and performance.

Maslanka also places great importance on the work ergonomics of the instruments, since this is an essential factor in ensuring safety in daily operations. These basic values and the resulting characteristics of the products have made all the difference for our customers for many decades.



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Social Media · 🖒 🛩 in

Areas of Activity • | Technology transfer between science and industry

| Initiation and support of networks

| Support for technology-orientated startups

| Funding support for innovative project concepts

| Providing and presenting regional life sciences information

| Building and coordinating scientific and interdisciplinary networks

| Establishing contacts among experts from all disciplines

| Organisation of events and seminars

Collaborations

- External | Founding member of the Council of **European Bioregions -CEBR**
 - | Member of ScanBalt
 - | Member and contact point in Berlin for the Enterprise Europe Network (EEN)
 - | Member of EIT Health and Global **Health Hub Germany**

Berlin Brandenburg ... a leading hub for life sciences and healthcare

The Berlin-Brandenburg region is Germany's "health capital" and one of the leading international life sciences locations, as it is both home to the German government and the centre for healthcare industries. The region's distinction is anchored in its unique research and clinical landscape, as well as its ability to closely link the key players in the life sciences and healthcare. Medical technology, in particular, is a strong driving force within the Berlin-Brandenburg HealthCapital cluster, generating innovation and growth there and beyond.

... MedTech meets innovation

More than 300 medical technology and digital health companies are located in the German capital region. These include market leaders such as Ada Health. B. Braun, Berlin Heart, BIOTRONIK, Cerner, Eckert & Ziegler, Karl Storz, Ottobock, and Zimmer Biomet. The main activities are focused on digital health, medical imaging, cardiovascular support systems, minimally invasive surgery, as well as orthopaedics. Over the last two years the Berlin and Brandenburg medical device community has been marked by technological trends, that can also be observed on a global scale: personalisation and digitisation.

... Key technologies: artificial intelligence and additive manufacturing

The innovative power of the German capital region around Al is demonstrated by a significant number of healthcare startups. They are pushing the boundaries of traditional healthcare with Al solutions. There is also a very strong research landscape in the field of Al and data, with several research groups at Charité, the Berlin Institute of Health, the Berlin Big Data Center, the German Research Center for Artificial Intelligence, and others.

The healthcare sector is also one of the most exciting seaments for 3D printing. In the future, customised prosthetics or implants could be developed by using these techniques. For an interface between awareness,



EUROPEAN UNION European Regional Development Fund

concrete development processes, and legislation, companies within that segment profit from business networks like Medical goes Additive as a knowledge and transfer platform.

... where startups meet grownups

With their innovative spirit and digital expertise, startups deliver fresh solutions for digital transformation in the healthcare industry. The German capital region is home to over one hundred digital health startups, and the numbers are growing each year. State-of-the-art technologies such as machine learning, artificial intelligence, and big data accelerate new applications. The regional startup ecosystem is highly self-organised and offers young pioneers a broad range of events such as meetups, barcamps, seed camps, and hackathons.

... offering service and support for players in the German capital region

The central contact and coordination office for all issues concerning life sciences and healthcare in the German capital region is the cluster HealthCapital. At the interface of business, science, and clinics, the HealthCapital cluster management drives networking and technology transfer, and supports companies interested in relocating to the region. Berlin Partner for Business and Technology and the Economic Development Agency Brandenburg (WFBB) are responsible for managing the cluster.

Meet us in 2021 - digital/on-site

BIONNALE, 12 May, Berlin DMEA, 8-10 June, Berlin HIMSS21, 9-13 August, Las Vegas MEDICA, 15-18 November, Düsseldorf



Name · Hein & Oetting Feinwerktechnik GmbH

Address/P.O. Box • Merkurring 86
Postal Code/City • 22143 Hamburg

State · Hamburg

Contact Person • Daniel Richter
Telephone • +49-40-66859057

Email · daniel.richter@hein-oetting.de

Website · www.hein-oetting.de

Social Media •

Number of Employees • 100

Founded (year) · 1992

Areas of Activity • | Medical Technology

| Aviation

| Laser Technology

| Space Travel

| Mechanical Engineering

| Measurement and Analysis

Technology

| Navigation and Control Technology

Annual Turnover · > €12m

Hein & Oetting – a reliable supplier and partner

A strong performance can especially be demonstrated by means of high adaptability in the event of production peaks, as Hein & Oetting has recently proved.

The manufacturer of mechanical and mechatronic components for customers in the field of medical technology produces high-precision parts in small and medium-sized series.

Hein & Oetting is managed by the owner himself and employs around 100 people at two different locactions in Northern Germany. In spring 2020 this team mastered the challenge of a rapid increase in demand. One of their customers, Weinmann Emergency, a leading producer of life support devices for emergency ventilation, was forced to dramatically increase the number of finished products in order to react to the massive demand due to COVID-19. In this situation Weinmann could blindly rely on their supplier. 14 years ago Hein & Oetting took over Weinmann Emergency's complete turning shop, including the whole corresponding operational staff and has been responsible for the design, disposition, and manufacturing of nearly 200 assemblies and components of this medical equipment manufacturer ever since. When the coronavirus crisis struck, Hein & Oetting was in place and up to the challenge.

High-performance processes for a flexible production

ensure their deliveries.

The key to success for the direct and quick reaction to the increase in demand is based on Hein & Oetting's enormous flexibility. The company is organised on lean principles that guarantee rapid processing combined with a 24/7 production because of a high degree of automation. This forms the solid basis for increasing the level of capacity. In addition Hein & Oetting quickly increased the workforce by four further people in the turning department. Furthermore they invested in a new machine that was taken into operation immediately. Capacities freed up from other customers were used for additional production of medical technology parts, and at the same time subsuppliers were encouraged to







Complete identification with the customer

In parallel, Hein & Oetting installed a new safety concept, in order to protect their own employees against the negative impact of the pandemic.

The teams worked in different shifts around the clock without any temporal overlap following a strict hygiene protocol.

All other clients also benefit from this commitment and this one hundred percent identification with the customer, as shown by Hein & Oetting's emphasis on Weinmann Emergency's needs and requirements e.g. clients in the field of laboratory analysis technology. These producers were confronted with a similar increase volume and were able to master it on schedule thanks to Hein & Oetting's continuing support and efforts.



Name · HELMUT ZEPF Medizintechnik GmbH

Address/P.O. Box · Obere Hauptstrasse 20 Postal Code/City · 78606 Seitingen-Oberflacht

State · Baden-Wuerttemberg

Contact Person • Patrick Zepf

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Website · www.zepf-dental.com/oem

Social Media · 🖒 🔼 👩





Number of Employees · 120 Founded (year) · 1921

Areas of Activity · Innovative developments and production of medical and surgical instruments

100 Years of "Made in Germany"

For generations already, HELMUT ZEPF has been a reliable partner in developing and manufacturing dental and surgical instruments. From the very first beginning of project planning phase until first serial batches are supplied, you can rely on one dedicated project partner who will take care of your demands fully and is in the position to take action by flat and fast decision making channels.

OFM

Benefit from our experience and our high level of inhouse production depth as innovation leaders in dental surgery, implantology and orthodontics.

- Design and prototype construction
- CNC production and automation
- · Vacuum hardening & soldering
- · Galvanic working steps, vibratory grinding, beam technology & cleaning
- · Laser welding & marking, GS1, HIBC, UDI with verification protocol (in-house verifying tools and machines)
- · Packing & logistics





International

We export to over 70 countries worldwide!

Our references in the field of contract manufacturing include renowned market leaders in dental implantology, oral- and maxillofacial surgery, ENT instruments, ophthalmologic instruments as well as instruments for neuro- and spinal surgery.

Our storage and maintenance solutions i.e. our diverse washing baskets find their individually adapted application in all areas of medical technology.

Especially in complex instruments and products you can rely on us such as:

- Individually equipped storage and washing baskets for hygienic and maintenance procedures
- Micro surgical instruments
- Certified manufacturer for
 - risk class 1M products, i.e. torque wrenches with optional calibration protocol
 - risk class IIA products, i.e. bone drills, bone mills and trephines
 - risk class IIB products, i.e. dental implants (bone screws and pins)

Why you should contact us for your project realization:

- Certified medical device manufacturer
- High level of in-house production
- Tuttlingen as our origin region, in which we combine:
 - · High-tech production and processes
 - · Surgical mechanic craftmanship
- Many years of experience in taking care and supporting national and international projects



Name · Hobe GmbH I micro tools

Address/P.O. Box · Baindter Strasse 27
Postal Code/City · 88255 Bainfurt

State · Baden-Wuerttemberg

 ${\color{red}\textbf{Contact Person}} ~ \cdot ~ \textbf{Dr.-Ing. Jens-J\"{o}rg E} \\ \textbf{E} \\ \textbf{Ber} \\$

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Website · www.hobe-tools.de

Social Media · in 🔏

Number of Employees • 31

Founded (year) · 1971

Areas of Activity • | Micro Tooling

| Solid Carbide Tools

Member of



Boundless enthusiasm for inovation

At Hobe, innovation results from motivation. Our medium-sized enterprise is perfectly dimensioned to foster an effective innovation culture. Thus, every employee is encouraged to contribute creative ideas and new solutions. As a company, we regard our clients' complex demands as welcome challenges, which we meet by delivering seemingly impossible solutions.

Our goal: optimum machining solutions for all industries

Hobe micro-tools are successfully in use worldwide, for example, in the manufacturing of medical instruments, precision mechanical tools, and electronic components. Whether as standard tools, special tools, or custom development: we offer the best machining solution for every industry and application. Our sophisticated tooling systems contribute to making our clients' production processes more efficient, with a convincing combination of innovation, product quality, and profitability.

Quality

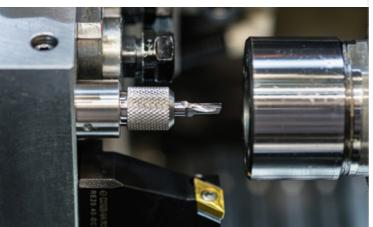
We can thank our motivated, highly trained employees and their commitment to deliver our compelling product and service quality at all times to our clients. Accordingly, Hobe produces exclusively in Germany with development and and manufacturing all under one roof. All business processes are reviewed by a certified quality management system according to DIN EN ISO 9001 and are continuously improved. For us, quality means optimum product properties, tailor-made tool and process solutions, and a reasonable price-performance ratio.

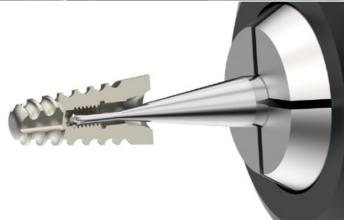
Medical technology

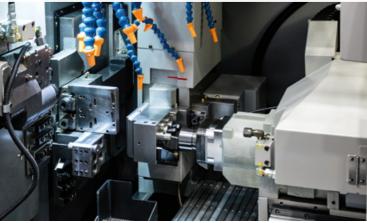
The manufacture of medical devices and components requires extraordinarily powerful tool solutions. This is particularly true for materials that pose difficult machining requirements, such as titanium or stainless steel. And this is where Hobe's solid carbide micro-tools excel. Its exceptional performance guarantees the desired dimensional and shape accuracy, as well as surface quality, at all times.

HOBE MICRO TOOLS









Furthermore, selected carbide grades with outstanding wear and flexural strength ensure a long tool life.

In medical technology, meeting manufacturing precision requirements presents increasingly complex challenges. Medical components are subject to progressive miniaturisation and sophistication. On the other hand, growing cost and time pressures make higher productivity a must.

Typical examples in this field are:

Pacemaker – internal shaping of electrode components Resectoscope - tube fitting (e.g. internal shaping) and lens fitting (e.g. internal grooving)

Implantology

Human implants and prostheses require the highest quality standards. This is the only way to avoid health risks and achieve a long product life. Accordingly, extremely corrosion- and wear-resistant materials are used in the manufacture of medical devices. The Hobe micro tools range includes a wide range of VHM high performance tools that are ideal for medical device production.

Hard-to-machine materials such as platinum, titanium, stainless steel, and special alloys present us with special challenges in tool development - which we gladly accept. Through intensive exchange with customers, we have in-depth process knowledge in the field of implant prosthetics and dental technology.

Characteristic examples for implantology include: Dental Implant/Dorsal Stabilisation (pedicle screw) internal shaping (e.g. thread whirling, creation of multiedge profiles)



Name · INDEX-Werke GmbH & Co. KG

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Postal Code/City · 73730 Esslingen

State • Baden-Wuerttemberg
Telephone • +49-711-3191-0

Email • info@index-traub.com

Website · www.index-traub.com

Number of Employees · ~2,100 Founded (year) · 1914

Annual Turnover · ~€575m

With its INDEX and TRAUB brands, the INDEX Group is one of the world's leading manufacturers of CNC turning machines. The Esslingen group of companies is active around the world with five production sites, five international sales and service companies, as well as 80 representative offices.

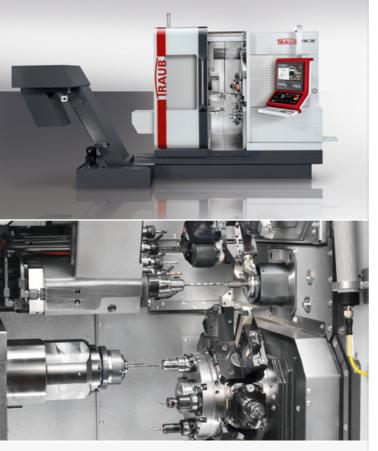
Progress has a long tradition

INDEX-Werke was set up in 1914 by Hermann Hahn, who began that year with the production of automatic turret turning machines. He was a Swabian entrepreneur through and through, who laid the foundation for an impressive enterprise with creative ideas and an aspiration for quality. Within four decades, more than 20,000 turning machines had been sold and these formed the basis for the excellent reputation of INDEX around the world. In 1975, INDEX began with the production of multi-spindle turning machines. A few years later, the company entered the market for CNC technology, in which it soon assumed a pioneering role. After the death of Eugen Hahn, the son of the company's founder, 85% of the company shares were put into a foundation. In 1992, INDEX introduced a new generation of turn-mill centres based on a modular component system. In 1997, TRAUB Drehmaschinen GmbH & Co. KG from neighbouring Reichenbach/Fils was taken over and integrated into the INDEX Group. The company pursues a two-brand strategy to this very day.

Optimal production solutions for the customers

Since 2002, INDEX has offered multi-functional production centres in which different process technologies can be integrated in one machine. The complete machining means not only that quality and precision are higher but also that production costs, in particular, are reduced as a result of the shorter throughput times. This benefit is appreciated by INDEX customers worldwide, as it strengthens their competitiveness. The main customers of INDEX turning machines include, above all, companies from the automotive and automotive supplier industries, from the mechanical engineering, electrical







engineering, and electronics sectors, as well as manufacturers of fluid technology and of controls and instruments. Growth markets are to be found in medical technology and in the aerospace industry.

INDEX has many years of experience with difficult-tomachine materials such as titanium, cobalt, chrome and stainless steel and is a competent partner for the production of implants, e.g. hip, shoulder and spine. In addition, INDEX has high-tech solutions for the production of a wide variety of bone screws and dental abutments. The solutions are designed individually with the customer reduce machining times and ensure safe processes.

Everything from one source

The particular strength of the INDEX Group lies in the development of the best production solution for each customer. With its INDEX and TRAUB brands, the Group offers the largest programme for complete machining of turned parts, both for series and single-item production. The application engineers can draw on this basis when developing ideal production strategies for their customers. Particularly with geometrically demanding and highly precise workpieces, the engineering services for customers are of inestimable benefit. Engineering, along with research and development, has a key role at INDEX. More than 10 percent of all staff are employed in this field, and they contribute with their know-how and their ideas to ensuring that INDEX and TRAUB customers have a competitive advantage.

Quality, made in Germany

INDEX and TRAUB consciously count on Germany as a production location and produce important components on their own turning machines and turn/mill centres. Motivated and superbly qualified employees ensure the high quality of the machines, each one reflecting their diligence and attention to detail.

KLINGEL

medical metal

Name · Klingel medical metal GmbH

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State · Baden-Wuerttemberg

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info@klingel-group.de

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Social Media · in 🗸 🗅

Number of Employees · 330 (600 group)

Founded (year) · 1986

Areas of Activity · Contract manufacturer with one-stop shop service for the medical application fields:

> I dental (implants, abutments, instruments)

I orthopaedics and trauma (implants and tools for spine, hip, knee)

I endoscopy (housings, guiding parts, optical parts)

| cardio(vascular) systems (micro parts for blood supply, heart valves, pacemakers)

I robotic assisted surgery (endoscopic parts, housings, joints)

I medical devices (sensor and light housings, parts and assemblies with mechanical function)

Collaborations

Annual Turnover · €28.5m (€70m group) in 2020

External · Part of Klingel medical metal group with its partner companies

> I Klingel medical metal GmbH, Pforzheim (D)

I Josef Ganter Feinmechanik GmbH, Dauchingen (D) (since 2015)

| Bächler Feintech AG, Hölstein (CH) (since 2019)

| Puracon GmbH. Rosenheim (D) (since 2020)

Metal Precision for Medical Purposes

Since its founding more than 30 years ago, the Klingel medical metal GmbH has developed into a Europe-wide leading company in the area of precision engineering. The machining specialist develops and manufactures high-precision, functional components from hard-tomachine materials, primarily stainless steel and titanium, in uncompromising quality and technical aesthetics. The products of the full contract manufacturer meet the highest standards of medical technology and other sectors, such as measurement and control technology and aviation and aerospace. The high-quality services with their long-standing core competences in precision CNC-machining are based on decades of experience and expertise in the specific characteristics of the materials. Klingel medical metal is certified according to DIN EN ISO 13485:2016 and is FDA-registered. The 330 employees work in compliance with certified and traceable process instructions, which are reliably documented.

Together with Josef Ganter Feinmechanik in Dauchingen, Puracon in Rosenheim and Bächler Feintech in Hölstein/Switzerland, the company......, the company belongs to the Klingel medical metal group, with its headquarters in Pforzheim. The "mother company" of this merger has four plants in the industrial zone "Altgefäll" with a total production area of 16,000 square meters. The unparalleled one-stop shop of the Klingel medical metal group with its four partners offers its customers a large selection of technologies and a wealth of experience in processing complex, hard-tomachine materials and geometries. The meticulously planned process and interface management ensure maximum efficiency and reduced throughput times. With its sustainable growth strategy, including continuous investments in state-of-the-art machinery, new manufacturing technologies, and automation, the Klingel medical metal group stands for long-lasting partnerships. Our customers rely on the highest quality in metal precision with minimal tolerances and maximum functionality - made in Germany and Switzerland.









One-stop-shop for medical components

Klingel medical metal manufactures and finishes medical parts such as dental implants as well as orthopaedic and spine implants and tools, but also instruments and components for endoscopy, minimally invasive and robotic surgery, (cardio)vascular systems, and medical devices. Based on our high in-house competence for a broad, customised value-added service, we work on more than 200 CNC turning and milling centres and special machinery. Our highly qualified staff are experts at the conjunction of raw material specifications and process know-how for CNC machining, assembling, and surface finishing.

From small and mid-size series up to six-digit mass production quantities, Klingel medical metal produces high-precision mechanical CNC turned and milled parts, wire-eroded components, and ready-to-install and 3-D free-form components - even at short notice if required, and with packaging and logistics included.

We can establish your individual manufacturing process in our one-stop-shop system, which includes

- Design for manufacturing
- Metal laser sintering
- Machining (turning/milling/erosion)
- Cleaning
- Surface finish (electropolishing, anodising, coating, grinding)
- Laser engraving
- Assembly, 100% inspection, sterilisation
- Packaging
- Logistics



Name · KOCH Pac-Systeme GmbH

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State · Baden-Wuerttemberg

Telephone • +49-7445-181-0

Fax · +49-7445-181-50

Email · info@koch-pac-systeme.com

Website · https://koch-pac-systeme.com







Number of Employees • Over 400 employees worldwide

Founded (year) · 1969

Areas of Activity · Special machine manufacturer of custom blister machines as well as packaging lines featuring modular designs

Annual Turnover · €70m

KOCH Pac-Systeme – Perfectly Packaged Diversity

KOCH Pac-Systeme is a recognized quality brand for innovative packaging technology and extensive knowhow. A specialist in meeting complex demands, KOCH draws on its superior development expertise to design and implement custom modular machine solutions for applications in the fields of medical products, contact lenses and consumer products.

Portfolio

Whether it is a pen or a brake disc, medical implants or pharmaceutical products, monthly lenses, or eye drops. Regardless of which product from the consumer goods, medical technology or contact lens sectors customers want to package. KOCH Pac-Systeme has the right blister machines, cartoners and integrated packaging lines to meet customer's needs.

Sustainability

The portfolio ranges from smart, individual solutions to the end-to-end automated KOCH packagingLine. According to the "Package the smart way" principle, KOCH also intelligently brings together all aspects of sustainable packaging: Protection of the environment through recycled or bio-based materials, reduced use of materials in the process, and brand-oriented product presentation with packaging formats such as blisters made of RPET film or cyclePac® mono-material packaging.

KOCH PAC-SYSTEME









Support

A systems partner to international customers, KOCH provides support through its team of specialists, tailormade services covering the machine's entire service life, and perfectly combined digital services with its K 4.0 smartpacks.

By your side

To design the optimal blister packaging solution, KOCH experts support the customer throughout the entire design process all the way to the commissioning of the system on site. Comprehensive services and technical support allow the efficient operation of a custom KOCH packaging machine or KOCH packagingLine.



Name · THE LEE Company Lee Hydraulische Miniaturkomponenten GmbH

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Email · info@lee.de

Website · www.lee.de

Number of Employees · 1000/11

Founded (year) • 1948/1979

Areas of Activity • | Medical Fluidic products

| Industrial Fluidic products

| Healthcare Devices

| Medical Technology

| Environmental Monitoring

| Aerospace

| Automotive

| Oil & Gas

THINK BIG, design small

With this philosophy, The Lee Company has pioneered the development of miniature fluid control products for over 70 years.

Started in 1948 as a specialist for products for the aviation industry, Lee soon expanded its field of activity into laboratory and medical technology.

The principle for all products is to be as small as possible and yet offer a maximum flow and top performance.

The Lee Company is a leading supplier of precision fluid control components that fulfil critical requirements in medical applications such as respiratory therapy, patient monitoring, renal dialysis, patient simulators, apheresis systems, sterilisation equipment, and therapeutic devices used in dental, cosmetic, and compression therapy. Lee is an engineering partner that can equip its customers with the solution they need to overcome key challenges, such as conserving space, weight, and power. Lee operates in various industries in which it also sets the standards for quality.

Application example: Oxygen concentrator

The example of an oxygen concentrator shows where LEE products can be used in respiratory therapy. The air we breathe consists mainly of nitrogen (78%) and oxygen (21%). The function of an oxygen concentrator is to produce enriched oxygen from the ambient air and deliver it to a patient who requires additional oxygen therapy. A compressor is used to force air through a series of filters or membranes, known as molecular screens, which remove nitrogen from the air and ultimately release high-dose oxygen. Solenoid valves are used in these devices to control the air flow, regulate the oxygen flow, and vent the oxygen tank when necessary.







Ventilators

A ventilator has similar requirements, since the main task is to dose and monitor the delivery of the correct amount of oxygen. Also here solenoid valves are used to manage the ventilation.

Electro fluidic components

- Control solenoid valves
- Dispensing solenoid valves
- Isolation solenoid valves
- Dispensing pumps
- Atomizing nozzles
- Dispensing nozzles

Assemblies

- Manifold capability
- Multi-layer manifold technique
- Integrated components
- Wide variety of material options & techniques
- MINSTAC fitting systems & components

Precision microhydraulics

- Check valves
- Pressure relief valves
- Flow control valves
- Precision orifices
- Vent valves
- Shuttle valves
- Safety screens
- Sealing plugs



Name · Lumis Life Science Consulting GmbH

Address/P.O. Box · Giesebrechtstrasse 15

Postal Code/City · 10629 Berlin

State · Berlin

Contact Person · Heike Schön (Managing Director)

Telephone • +49-30-235911-599
Email • info@lumisconsult.com

Website · www.lumisconsult.com

Social Media · in

Founded (year) · 2020

Areas of Activity • | Outsourcing Clinical Trials

| CRO/Vendor Management | Oversight Management Lumis Life Science Consulting GmbH was founded in 2020 as a subsidiary of Lumis International GmbH with a focus on providing consulting to small and mid-sized medical device and biopharmaceutical companies for the outsourcing of their clinical activities.

Our services cover the whole spectrum of vendor selection and management, clinical trial oversight management, and training. Jointly with our customers, we develop tailored solutions to optimise their clinical product development programmes. We collaborate with a network of experienced subject matter experts, cooperation partners, and consultants for the best services in different areas.

Medical device companies have to deal with a growing regulatory demand for clinical data, reflected in the new regulation (EU) 2017/745 on medical devices (MDR), coming into effect in May 2021. Consequently, these companies increasingly evaluate their medical devices in clinical trials. These trials add substantially to the development time of medical devices. Therefore the companies seek support in accelerating the clinical development of their products.

Outsourcing the conduct of clinical investigations can speed the development process and safe resources

Small to midsize medical device companies often face the challenges of limited human resources. Thus, the outsourcing of clinical trials is the common way to proceed with clinical development. Moreover, the survival of such companies is frequently dependent on the successful, timely completion of clinical trials on a limited budges. Efficiency in managing clinical vendors is crucial. The safety of patients and the quality of clinical data must not be compromised.

LUMIS LIFE SCIENCE CONSULTING





Especially during their first clinical investigations, it is not easy for companies to decide on which activities to outsource or to perform in-house. Thus, each activity should be evaluated in advance:

- for its strategic importance
- for the main reasons to outsource, e.g. cost savings, access to clinical and/or regulatory experience
- for related risks and benefits, e.g. increased complexity of project and oversight management, access to opinion leaders

Many CROs recognise the increasing need among medical device companies for support in clinical trials. It is vital that the developer of the medical device outsources the clinical activities to the best fitting CRO. At Lumis Life Science Consulting we acknowledge the specific needs and priorities of medical device companies, while also reflecting their size, budget, and stage of product development. Our experts work closely with the companies to ensure that their selected CRO and vendors provide suitable services at the highest quality. We are specialised in outsourcing, vendor management, and oversight management, and have been building bridges between sponsors and CROs/vendors for over 20 years, creating successful partnerships.

Applying Key Performance Indicators to reduce the risks and to measure performance of outsourced activities

In compliance with the MDR guideline, in line with the ISO Norm on Good Clinical Practice (ISO 14155:2020), Lumis's experts support the development and implementation of effective risk-based management systems for the manufacturers, to ensure efficient and active monitoring and evaluation of vendor performance, applying Key Performance Indicators to oversee the progress of clinical investigations. Furthermore, the integration of a shared governance model is vital for success, to guarantee that the medical device manufacturer and vendor share one vision and have common goals. We optimise the interaction between manufacturer, CROs, and vendors by mastering different corporate cultures, expectations, and efforts, so that your company will smoothly advance to the next product approval stage.



Name • Magnet-Schultz GmbH & Co. KG

Address/P.O. Box · Allgäuer Strasse 30 Postal Code/City · 87700 Memmingen

State · Bavaria

Contact Person • Florian Neumann

Telephone • +49-8331-104-0

Fax + +49-8331-104-333

Email · Info@magnet-schultz.com

Website · www.magnet-schultz.com

Number of Employees • 2700 Founded (year) • 1912

Areas of Activity · Aerospace

Automotive

Electromechanics

Hydraulics

Medical Technology

Pneumatics

Annual Turnover • €460m Relevant R&D Budget • 5% We are specialists in electromagnetic actuator, sensor, and valve technology. We develop individual high-tech solutions in cooperation with our customers from the aerospace, automotive, electromechanics, hydraulics, medical technology and pneumatics industries, and many more.

As an independent family company in the 4th generation, we stand for experience, know-how, sustainability, and the highest quality. With a wide range of in-house production at our sites in Europe, the USA, and China, we are a reliable and global partner for innovation today and in future. Our key to success has been the same for more than 100 years: "We support our customers' success!"

For the diverse applications in medical technology, we reliably control the fulfilment of the requirements related to electromagnetic solutions. Furthermore, we possess a high competence in supplying function units and valve units as a combination of solenoid, mechanics, and electronic control. Safe function, low noise emissions, and the application of FDA-compliant and physiologically harmless substances are taken as granted, depending on the field of application.

Applications

Product and applications samples for medicial technology include:

- Flow control valves for ventilation, anaesthesia, and minimally invasive surgery
- Linear and rotary solenoids for actuation of hose clamps in dialysis machines
- Miniature valves for pneumatic control in blood pressure monitors
- · Holding magnets for the fixation of X-ray tables
- Locking units for locking doors and flaps on sterilisers and centrifuges







Individual development

Together with our customers, we develop individual electromagnetic high-tech solutions according to your requirements. With our experience, our development skills and our technical possibilities, we support you as a long-term partner with high innovative strength.

Thanks to our development competence, we are leaders in the development and production of electromagnetic actuators and sensors. Our products are developed as custom designs in order to meet our customers' challenges. We provide engineering competence from acquisition to production to application.

Innovation

In order to secure this level of innovative force and development competence on a long-term basis, we pursue basic development, using simulation and calculation tools as well as mechatronic control technology. We think ahead, so we invest in Research & Development as well as in training our engineers and skilled employees.

Production

Solenoids and valves make great demands on precision and specially adapted production procedures and processes. So know-how in production is one of our core competences and requires a large range of in-house manufacture. Our ultra-modern equipment guarantees flexibility and competitiveness.

Quality

Even before the application of QA systems, "MSM quality" was well-known. The goal of our quality management is to improve the quality of our processes, products and services continuously and to secure them by effective control circuits and modern quality management methods. By regular audits, we compare our quality standards with the relevant national and international standards as well as with customer requirements.



Name · mayr® power transmission

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Fax + +49-8341-804-492607

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Website · www.mayr.com

Social Media · in X D







Number of Employees · 1,200

Founded (year) · 1897

Areas of Activity • | Electromagnetic ROBA-stop® safety brakes for the holding, positioning, and securing of medical devices and furnishings such as surgerysupporting robots, X-ray devices, tomography beds, electric wheelchairs, surgical microscope

> | Load-disconnecting EAS® torque limiters in medical devices such as

tomography beds. etc.

stands, etc.

| Electromagnetic, energise to engage ROBA®-quick brakes, for example in therapy devices for muscle build-up I tendo® DC motors, for example in

devices used to look at X-ray images

Collaborations

VDMA Arbeitsgemeinschaft (German **Engineering Federation) for medical** technology

Member of



Safety does not allow for compromises

mayr® is an internationally-leading company for mechanical power transmission. Every day, clutches, couplings, and brakes made in the Allgau region safequard machine movements worldwide. This task does not permit compromises on quality - especially in medical engineering, because the safety of patients has utmost priority at all times.

Whether in x-ray devices, surgical microscopes, electric wheelchairs, or in surgery-supporting robots - mayr® safety brakes have a wide field of application in medical engineering. High-tech devices often require individual brake solutions. For this purpose, mayr® power transmission provides a wide portfolio of application-optimised safety brakes based on market-tested series products. These fulfil individual customer wishes and distinguish themselves by the same quality, technical maturity, and safety as standard products. For example, during surgery the robot arm must not under any circumstances wobble or sink. The brakes must hold determined positions accurately and backlash-free, and simultaneously operate extremely quietly. This task does not allow for concessions in quality, because safety does not allow for compromises.

Short switching times and high performance density

Safety brakes by mayr® power transmission are tailormade to the requirements of medical engineering. They ensure reliable, constant holding torques throughout their entire service life and convince by extremely short switching times and high performance density despite low energy consumption. Furthermore, a long service life, minimal maintenance, and simple and quick installation make these brakes a particularly cost-effective solution. Depending on the requirements, the brakes are equipped with integrated noise damping. Every individual safety brake which leaves the mayr® power transmission works must pass a 100% inspection after complete assembly and adjustment. All measurement values determined are recorded with the corresponding serial number of the brakes in an electronic database.







This guarantees 100% traceability. These comprehensive tests and checks are a central component of the mayr® understanding of reliability and quality. They ensure that the values stated in the catalogue can also be reliably achieved and that the brakes function under all ambient conditions.

Reliable partner since 1897

Due to its quality standards, mayr® power transmission has gained the trust of many leading industrial companies as a reliable partner worldwide. Quality is not just theory at mayr® power transmission, but also an integral component of our corporate culture, which the company has incorporated in all processes, products, and structures since it was founded in 1897. The guiding principles of our renowned family-run company are safety, reliability, and innovation - not only in Mauerstetten, the German company headquarters, but also in all international locations. mayr® power transmission operates two further production sites in Poland and China, and is globally represented with sales subsidiaries in the USA, France, Great Britain, Italy, Singapore and Switzerland, and additionally with over 40 further national offices.

MIKRON TOOL

Name • Mikron GmbH Rottweil
Abteilung Werkzeuge

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State · Baden-Wuerttemberg

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Email · info.mtr@mikron.com
Website · www.mikrontool.com

Social Media · in

Number of Employees · 245 (worldwide)

Founded (year) · 1998

Areas of Activity • Development and fabrication

of cutting tools

Annual Turnover · €45m Relevant R&D Budget · €1.4m

External • DMQP (DMG MORI Quality Products)-

Collaborations Programme

Tools are our passion, small dimensions are our specialty, and hard-to-machine materials are our challenge. Every day at Mikron Tool is dedicated to achieving the best possible results in these areas.

Mission - Mikron Tool

We are working daily to achieve a leading position worldwide in the high-precision machining of small dimensions and challenging materials. This includes the regular development of new and unique tools as well as customer-specific solutions. In everything we undertake, a high level of competence is important. Focusing on our strong points is the key to our success. These include our well-trained and motivated employees, intensive development activities and investment in the most advanced production technologies.

MedTech Solutions - the tool range

The highest quality, precision, and process reliability are some of the main criteria when manufacturing medical devices, wether you are speaking about implants (trauma, prostheses or screws), instruments, or devices. This is exactly where our strength lies: in the development of carbide cutting tools for machining high-quality and biocompatible materials such as stainless steels, titanium, or chrome-cobalt alloys. We offer standardised tools for drilling, milling, and deburring in a diameter range from 0.1 to 8 mm as well as customised solutions up to 32 mm for all machining operations.

Latest innovations

A product is considered NEW at Mikron Tool only when it is unique and with high added value for the user. Without a doubt, this is true for every single CrazyLine product. For example:

Machining hexalobular sockets for bone screws

CrazyTool Hexalobe is a new concept for machining hexalobular sockets on medical screws (better known as Torx® sockets) made of stainless steel or titanium. A combination drill and a milling tool is all you need to



complete the four operations (predrilling - chamfering - milling - deburring). In three steps you reduce the cycle time by 50% whilst achieving a highly precise profile and an excellent surface quality.

Reducing machining time for bone plates

Integrated cooling, high-performance coating and carbide, adapted cutting geometry, all combined with an optimised cutting strategy - these are some of the features of our performance cutting tool package (CrazyDrill and CrazyMill product lines). With this we are able to reduce the machining time from two hours to 48 minutes for a distal radius plate made of titanium.

Technical support

How to produce a new part with the best adapted tools? What is the right tool for a new material? How to optimise quality and cycle time in an existing process? How to be more efficient and maximise my possible cost saving? Shall I use standard tools or rely on a special solution with combined tools? To answer all these questions, we are at your disposal with our Technology Centre and our specialised cutting tool team!

Quality made in Switzerland and Germany

All our tools are produced in Switzerland or Germany, where identical production facilities, machine programmes, measuring instruments, and skilled tool grinders guarantee the same level of quality for all our products.



Name · Minerva Group

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State · Bavaria

Contact Person · Christoph Golinski

(Director Business Development)

Telephone • +49 176 56 99 78 76

Email · cgo@minerva-plm.com Website · www.minerva-plm.com



Number of Employees · 100

Founded (year) · 1995

Areas of Activity • | Software solutions provider for **Medical Device and Life Sciences** | Supporting organisations with their Digitalization and Industry 4.0 | Providing software solutions for Design Control Management, **Product Documentation Traceability, Technical File Management,** Quality Management, etc. | Consulting

Minerva - World-class software for **Medical Device Product Development**

Minerva is the leading software solution provider for business challenges around product development, product registration, quality management, and market release of products in the medical device industry. Founded in Scandinavia in 1995, the company has established a global reputation for the development of a medical device software solution that is highly praised for its industryspecific capabilities, including best-in-class Design Control Management, Product Documentation Traceability, and Technical File Management, among others.

Today. Minerva offers one of the most comprehensive end-to-end medical device business software solutions on the market, bridging regulatory requirements, quality management, and product development to ensure a sufficient level of quality from start to finish. These include capabilities such as Design Control Management, Product Documentation Traceability. Deliverable Matrix. and Risk Management, helping medical device manufacturers reduce costs, increase product quality, and decrease time to market.

Minerva has a worldwide presence through a network of 9 offices across 7 countries. Our customers are situated across the globe, from Hong Kong and Australia to Europe, South Africa, and the United States, and include manufacturers such as Carestream Health, Edwards Lifesciences, Dräger, Fujifilm, Ottobock, Haselmeier, Valtronic, Bausch & Lomb, Biotronik, and many others.

Minerva's continued growth is underpinned by an unrivalled commitment to the development of best-in-class end-to-end medical device product development software, used by medical device manufacturers.

Read more about how our medical device solution can optimise your product development at www.minervaplm.com/medical-device.





Is your Design Control best in class?

Medical device companies are subject to regulatory and compliance demands related to their products and development processes. Often, that leads to a huge amount of data being produced in the form of documents and other data types. Managing this data is not easy, because the location, as well as the context of the documents and related data, needs to be structured. This is often where the problem occurs. And it gets even more complicated when you need to share your data or submit packages externally.

Many medical device manufacturers are looking for better ways to structure and manage their documents because of inefficient software support. Due to a lack of data integration, manufacturers are also searching for a solution to integrate data silos and ensure traceability and regulatory compliance. Minerva has worked in regulatory and compliance industries for decades and has developed methodologies to address the challenges medical device manufacturers face, by utilising digital data to drive business process transformation.

Let us discuss your challenges and learn more about our methodologies in this webinar: www.minerva-plm. com/webinars

Understand how you compare and where you can improve

With a global team of medical device sector experts, we are able to provide manufacturers around the world with knowledge of product development optimisation and a professional assessment and analysis of your current procedures, then benchmark them against best-in-class procedures used by world-class medical device manufacturers. Our 25 years of experience and comprehensive approach can provide manufacturers with a holistic view of their product manufacturing.

Read more about our benchmark assessment and analysis opportunity here: www.minerva-plm.com/benchmark



Name · MMM

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State · Bavaria

Telephone • +49-89-899-180

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Number of Employees • 1,200 worldwide

Founded (year) · 1954

Areas of Activity · Healthcare -

hospital sterile supply departments

| Cleaning and disinfection

| Sterilisation

| Packaging

| Logistics

| Documentation

| Mobile RUMED units

| Services & validation

I Consulting and planning

| Training and academy

Life Sciences -

laboratory and pharma industry

I Cleaning and disinfection

| Sterilisation

| Heat technology

| Services & validation

I Consulting and planning

MMM. Protecting human health

MMM Group has been operating worldwide as one of the leading system providers in the service of health since 1954.

With a full portfolio of products and services pertaining to sterilisation and disinfection systems for hospitals, scientific institutes, laboratories, and the pharmaceutical industry, MMM has positioned itself as a crucial quality driver and innovator on the German and international markets.

1,200 employee's expertise to the mission of the MMM

At our production plants in Stadlern (Bavaria) and Brno (Czech Republic), we manufacture products tailored to the needs of our customers around the globe. With both of these production sites, we ensure a high manufacturing depth and thus meet the extensive quality requirements of the medical technology industry.

Complete solutions for greater effectiveness

Our regional sales and service centres are proud to offer an ethos of customer focus and dedicated project management. Our customers can rely on us to find the very best solutions tailored to their individual needs both reliably and quickly. Whether it involves installing new devices or bringing existing devices in line with current guidelines by installing MMM upgrades - we have the perfect solution for everyone.

MMM as a holistic provider

Our services cover detailed planning and consultation, products and their software, installation, logistics and service, which includes the validation of all processes in the RUMED, right through to the end-to-end project management of extensive construction works.









Our quality "made in Germany" sets us apart

The high vertical range of manufacturing in our production plants ensures that we fulfil the strictest demands of quality for our customers. Our products "made in Germany" have garnered international recognition and meet the strict requirements of the medical technology sector.

Reliability is our commitment

You can rely on the durability of our products and their outstanding level of quality, as well as on our effective customer service. The high level of satisfaction amongst our customers and the extraordinary dedication of our staff speak for themselves.

We maintain strong partnerships

At the intersection between people and machines, and between business growth and social responsibility, we attempt to strike a balance among the interests of everyone involved and maintain cooperative relationships on a level playing field.

We are committed to your needs

With expert servicing, innovative products and services, and in our lively discussions with our customers, suppliers, and employees we do everything necessary to ensure that MMM continues to live up to its reputation as an outstanding provider of goods and expertise in the sterile goods sector.



Name • MULTIVAC

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Social Media · 🖒 🏏 in 🗸 🗅

Number of Employees • Approx. 6,500

Founded (year) · 1961

Areas of Activity . MULTIVAC is one of the leading

providers worldwide of packaging solutions for food products of all types, life science and healthcare products, as well as industrial items.

Reliable packaging solutions for the life science and healthcare industry

In 1968 MULTIVAC launched its first packaging solution for sterile medical products. What at that time began as an offshoot of the core business of food packaging solutions, is today a highly specialised business unit, which develops solutions for the automated packaging to GMP standards of medical items, pharmaceuticals, and biotech products.

Packaging solutions from MULTIVAC – flexible, modular, intelligent

Changing regulations, shorter life cycles for products, and the transition to just-in-time production have resulted in ever smaller batch sizes in the medical industry and pharmaceutical sector. At the same time, the industry is developing increasingly complex and sensitive products and applications, which in some cases are even tailored to individual patients. Many products are also having to be packed in ever smaller batches in order to meet regional and statutory specifications. These trends require packaging machines that can be converted quickly and easily to other pack formats or materials, so that short set-up times can be achieved.

For these applications MULTIVAC provides flexible and customer-specific packaging solutions, which are characterised by their modular construction. This means that new components, such as identification and inspection solutions, can be integrated very easily.

To ensure strict compliance with the statutory requirements within the sector, MULTIVAC offers a wide range of innovative packaging solutions. This machine concept is specially designed for the demands of the life sciences and healthcare industries, and it takes into consideration aspects of the packaging machine such as process reliability, ease of cleaning, cleanroom compatibility, and compliance with requirements on cleanliness.





MULTIVAC is also working on the development of digital solutions and services, so that it can offer companies the required added value. Thanks to its comprehensive sensor system and seamless digitisation, the RX 4.0 thermoforming packaging machine creates a completely new dimension in terms of maximum packaging reliability and consistent pack quality. The machine is also prepared for networking with the MULTIVAC Cloud, and this offers even more potential uses in digital services, for example.

About MULTIVAC

MULTIVAC is one of the leading providers worldwide of packaging solutions for food products of all types, life sciences and healthcare products, as well as industrial items. The MULTIVAC portfolio covers virtually all manufacturer requirements in terms of pack design, output, and resource efficiency. It includes a variety of packaging technologies, as well as automation solutions, identification, and inspection systems. Thanks to comprehensive line capability, all modules can be integrated into complete solutions. Thus MULTIVAC solutions ensure a high degree of operational and process reliability, as well as high efficiency.

The MULTIVAC Group has approximately 6,500 employees worldwide, with some 2,300 based at its headquarters in Wolfertschwenden. With over 80 subsidiaries, the Group is represented on all continents. More than 1.000 sales advisors and service technicians throughout the world use their know-how and experience to the benefit of customers, and they ensure that all installed MULTIVAC machines are utilised to their maximum.

Further information can be found at: www.multivac.com.



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Number of Employees · 42

Founded (year) · 1996

Areas of Activity · Machine Vision

Member of



Experts in Machine Vision solutions.

For 25 years, our customers worldwide have been receiving machine vision solutions for the inspection and identification of a wide range of parts for our target industries of pharmaceutical, medical, and healthcare technology. For inline optical quality inspection and material flow control in serial production, we develop and implement individual machine vision solutions based on globally available and proven technologies. A competent and dedicated team provides innovative, process-reliable solutions to meet your precise requirements. With a world-wide installation base of more than 5,000 machine vision solutions, OCTUM is one of the most experienced suppliers in the industry.

We provide your ideal solution.

Safety is the most important factor for pharmaceutical products. Industrial machine vision guarantees reproducible and traceable process steps in the manufacture of your products - the best technology to keep track of each process step and document the results. Since the company was established, OCTUM has been supplying inspection systems for the pharmaceutical and medical industry. With every installation you benefit from many years of experience in an environment where safety is the number one priority. Besides inspection solutions, we also provide machine vision solutions for the identification of all kind of markings on pharmaceutical and medical products based on OCR, OCV, and code reading tools for standard 1D and 2D codes either printed or as DPM codes and characters. Our inspection systems comply with GAMP5 directives and fulfill as well the requirements of 21 CFR Part 11.

OCTUM Machine Vision systems cover the following areas:

Glass and plastic vials

- · Empty vial and filling level inspection
- Muzzle control
- Stopper fit and crimped cap inspection
- Printing inspection on crimped caps and flip-offs
- Type and damage inspection

Syringes

- · Syringe length measurement
- · Finger flange damage inspection







- Syringe cap fitting inspection
- Plunger assembly inspection
- · Label position and LLA inspection
- · Safety device assembly inspection
- · Piston rod assembly inspection
- Completeness in the syringe nest

Tubs and trays

- Completeness of the syringe nest and tray
- · Tyvek position and seal joint inspection
- · Printing inspection on tub and nest

Labels (1D and 2D codes)

- Verification of label type and code grading
- · Quality and content of the plain text printing
- · Validation of GS1 codes
- · Check of label position

Wound material

- Contamination and sealing
- · Dimensions, shapes, and print inspection
- Structure and completeness of the layers

Pipettes and cups

- Injection moulding defects
- · Dimensions and shapes
- Roundness inspection and webbing ridges
- · Bending, deformation, and skew position
- Presence inspection and particle inspection
- · Completeness in the rack

Ampoules

- Ampoule head contour inspection
- Inspection for burn marks
- Printing inspection and height control
- · Inspection of colour rings and damages

We support you in the fulfilment of legal specifications throughout the entire pharmaceutical production process and guarantee you a constant and faultless production with rapid ROI. You can always count on our innovative strength, technological competence, and reliability. We are happy to show you the best solution for your application!



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Social Media · 亡 in 🗸

Number of Employees · Approx. 3100

Founded (year) · 1864

Areas of Activity • | Injection molding

Assembly

| Tool making

| Development

Annual Turnover · €476m

Founded by Matthias Oechsler in the Franconian town of Ansbach in 1864, the company is today regarded as a high-tech company for forward-looking solutions in plastics technology – from precise individual parts to complex assemblies and systems. Together with 3,100 employees at eight worldwide location sites, we drive innovation forward and open new future markets.

Due to our diverse product portfolio, we operate in various sectors, such as automotive, medical and footwear industry, as well as others. We are an innovative partner and driving force for our customers.

For over 30 years OECHSLER's healthcare products have valuably contributed to the pharmaceutical and medical industry. Our certified and high-quality product portfolio ranges from components for e.g. inhalers, wearables, and blood glucose meters to complex assembly units with many high-precision single components and integrated displays for medical products. All products entail the following benefits:

- Filiaree details/structures at microscale
- Different surface structures possible, e.g. scratchresistant, brilliant, etc.
- Certified according to ISO 13485 in Germany and China
- Integration of electronic and mechatronic components

Following GMP principles, the individual components for healthcare products are manufactured under clean-room conditions (ISO class 8) in accordance with validated processes in a precision injection moulding process. They are then assembled fully automatically on high-performance automatic assembly machines and subjected to a fully integrated 100% inspection. These resulting assemblies are delivered directly to e.g. the pharmaceutical industry with corresponding certificates ("C of A"/batch documentation).

With our technologies and innovations we drive improvement within the healthcare and pharmaceutical sector forward, which reaching and affecting many people.









Our services - your benefit

- International footprint (local for local) production at international OECHSLER production facilities possible, local delivery.
- 30 years of experience in healthcare (pharmaceuticals and medicine)
- Many years of expertise in complex, fully automated module production
- Integration of electronic and mechatronic components
- International project implementation from development to industrialisation
- Own toolmaking (among the top 20 annually: "Excellence in Production")
- Precision, multi-component injection moulding as well as IMD technology
- Clean-room production according to GMP principles
- Ample clean-room production area

Career

Become part of our team, in which technology meets passion.

You would like to contribute to our success story? Then join our international team at OECHSLER and make your career with us!

You will find more information at www.oechsler.com/karriere



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Founded (year) • 2017

Areas of Activity . | Life Sciences

| Semiconductor

| Photovoltaic

| Microelectronics

| Glass technology

| Chemical engineering

PACE-Tec – Quality made in the Black Forest

Based in the Black Forest in Germany, PACE-Tec develops and supplies customised machine and system solutions for a wide range of wet chemical production processes, which are established in the life sciences, medical device technology, solar, semiconductor, and glass/display business.

The company's core competencies, with more than 25 years of experience, include a wide variety of process technologies and their implementation under GMP standard for life sciences products.

Contactless, burr-free "grinding" of cannulas

The process developed by PACE-Tec for contactless electrochemical processing of cannulas, allows for burrfree manufacturing of all standard cuts in accordance with DIN 13097, as well as most customised shapes and geometries. This technology enables you to have extremely sharp-edged facettes next to perfectly smooth edges on the periphery without any post-treatment like sand blasting. With an outstanding reproducibility independent of the metal used for your process (stainless steel, Nitinol, titanium, ...) our technology lifts quality to a higher level.

Customised solutions for wet processing systems

PACE-Tec presents its cutting-edge technology platform for medical manufacturing featuring the most flexible modular system for wet chemical processing. The platform is adaptable for numerous different surface treatments, like etching, conditioning, and cleaning in a vast variety of applications, including implants, stents, and optical devices, to name just a few.

Our highly qualified engineers work hand in hand with customers to create the 3D concepts based on customer process requirements.





The platform is freely configurable from manually loaded wet chemical laboratory equipment for research and development applications to semi and fully automated systems for high-volume mass production. Standard process availability for:

- Cleaning with and without ultra- or mega sonic
- Etching / structuring / pickling
- Coating and conditioning
- Surface modification
- Electrochemical processing (polishing, ECM, textur-
- Fully automatic media supply and dosing stations

From process requirements to mass production

With its process and machine technology, PACE-Tec is a reliable partner for international customers in the fields of research and development as well as in mass production.

Depending on requirements, all necessary material and calibration certificates are part of the machine documentation. The software package includes customised data logging, substrate tracking, fully automated RFID, or a barcode reader. In all projects, topics like handling of raw data, data security, data integrity, audit trail, and the implementation of predicate rules like 21 CFR Part 11 are described in a User Requirement Specification (URS) and implemented accordingly.

Digital twins of the equipment can be created to enable close cooperation with customers and allows detailed test series. In addition, this enables effective training in an early project phase.

PACE-Tec pursues an integrative validation strategy and supports customer validation activities for implementing regulatory requirements. Therefore we offer support and cooperation at every step: Design Qualification (DQ), Factory Acceptance Test (FAT), Site Acceptance Test (SAT), Installation Qualification (IQ), and Operational Qualification (OQ). This serves to guarantee product quality and meet the binding marketing requirements of health agencies, in particular the rules of the GxP and FDA.

QUESTALPHA

for Medical and Life Science

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State · Hesse

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Email • info@questalpha.com

Website • www.questalpha.com www.sugisponge.com

Number of Employees ⋅ >30

Founded (year) · 2020 as spin-out of Kettenbach,

active since 1944

 $\textbf{Areas of Activity} ~ \cdot ~ \textbf{Manufacturing and commercialisation}$

of versatile medical grade sponge

material

Annual Turnover • Double digit million € sales

External • Active cooperation with several Collaborations corporate R&D departments and

academic institutions.

QUESTALPHA was spun off from Kettenbach in 2020. As leading manufacturer of high-performance absorbent materials made from cotton and regenerated cellulose, our expertise is dating back to the early 1950s with the launch of Sugi® medical sponge products. We cover the full value chain from research and development, production and logistics to marketing and sales of our product ranges. Our branded products have become indispensable solutions for doctors and hospitals in ophthalmology, ENT, dentistry, neurosurgery, microsurgery, hygiene, diagnostics, and wound care. Supplying our high-quality materials for developmental purposes and as versatile components in OEM products is supplementing our branded products business and enhancing our customer network in the medical device market.

QUESTALPHA's name emphasizes on our strategic realignment for further market expansion. While "QUEST" stands for the active pursuit, "ALPHA" underscores the best solution to be found for each individual customer.

SUGI® Products

All Sugi® Products contain our Sugi® medical grade sponge material made of pure cotton and regenerated cellulose with highest biocompatibility and tear resistance. Our material can absorb approx. 20 times of its own weight of aqueous solutions in a very short time. A soft elastic expansion is initiated and, depending on the area of application, a soft compression of the surrounding tissue is induced.

Sugi® Eve Spear

Ophthalmology places particularly high demands on surgical accessories. The highly absorbent Sugi® (sponge material) has proven to be very effective in the field of cataract surgery. With its tightly bound fibers and firm consistency when wet, Sugi® is ideal for diverse ophthalmic surgical procedures including LASIK. Sugi® outcompetes comparable materials in fluid wicking.

Sugi® RhinoSwabs

Rhino swabs have been specifically designed for functional endoscopic sinus surgery (FESS). Nasal surgery

Member of

::::BV**Med**



swabs with retrieval cord according to Prof. Dr. H. Stammberger are ideal for absorbing blood and secretion during endoscopic nasal surgery. The sponge material can absorb up to 20 times its own weight in aqueous solutions in less than 3 seconds. Sugi® absorbent swabs can also be used as a vehicle for various aqueous solutions.

Sugi® Plast

High quality components make Sugi®-Plast a unique product. Designed according to requirements of modern wound care products, Sugi®-Plast can be applied after vasopuncture, as well as in the field of secondary healing wounds.

SUGI® Inside

Customized raw material e.g. as a component in medical devices or for manufacturing processes of medical products. Individual development through our full service for component manufacturers, R&D specialists or material specialists.

Are you searching for a solution related to absorption, binding, retention, or separation of molecules in medicine and life science? Let us find out if our Sugi® material is suited for your purpose.

With Sugi® Inside we offer support and documentation during the entire development process of your customized raw material. A wide range of applications already benefits from the versatile physical and chemical properties of the unique sponge material.

In addition to our medical sponge activities, QUESTALPHA is both acting as a successful developer and producer of other medical devices and is seeking for additional applications.



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Website • www.rosler.com



Number of Employees • 1,800 worldwide

Founded (year) · 1933

Areas of Activity · Mass Finishing

Shot Blasting

Additive Manufacturing

Member of



About Rösler

For over 80 years the privately owned Rösler Oberflächentechnik GmbH has been actively engaged in the field of surface preparation and surface finishing. As global market leader we offer a comprehensive portfolio of equipment, consumables and services around the mass finishing and shot blasting technologies for a wide spectrum of different industries. Our range of about 15,000 consumables, developed in test centres all over the world, is specifically geared toward helping our customers resolve their individual finishing needs. Under the brand name AM Solutions we offer numerous equipment solutions and services in the area of additive manufacturing/3D printing. Last but not least, the Rösler Academy, our central training centre, offers practical, hands-on seminars on the subjects mass finishing, shot blasting, lean management and additive manufacturing.

High-quality surface finishing technologies for medical parts

The selection of a surface treatment process is the key factor that influences the functionality, performance and longevity of medical parts. Due to their precision, efficiency and economy, mass finishing and shot blasting are considered to be an indispensable part of the finishing process for a wide variety of medical parts in different manufacturing stages. Our flexible machines are able to do the surface preparation and final finishing starting from general cleaning, deburring, surface smoothing after casting, forging, stamping, machining, additive manufacturing, heat treatment, or surface preparation for plating, coating, or electro-polishing. This also applies to the final surface finishing stages for medical parts, such as passivation, high-gloss polishing, or the placement of a matte, non-glare finish on the surface of components.

Fields of medical application

Fields of medical application include endoprosthesis implants, trauma implants, spine implants, dental implants, medical instruments, endoscopy instruments. orthosis prostheses, and other medical and pharmaceutical devices.

BÖSLER OBEREL ÄCHENTECHNIK







Test centres worldwide

What's unique about Rösler's system is its integrative approach. Systems and processes are tailor-made to the respective processing requirements. Many subsidiaries of the Rösler Group are equipped with their own test centres, with the latest in systems engineering. In order to capture data on the respective processing sequence, customer workpieces first undergo sample processing in the test centres. This determines which processing method will be used and with which peripheral devices.

Process development and process optimisation

From sample processing to process design to mechanical implementation and expert after-sales service, you receive comprehensive solutions from a single source. The latest measurement technologies support our process development and optimisation. More than 190 engineers and technicians work daily in our construction and development departments on individually tailored system solutions.

Global network

Besides the German manufacturing locations in Untermerzbach/Memmelsdorf and Bad Staffelstein/Hausen the Rösler group has a global network of 15 manufacturing/sales branches in Great Britain, France, Italy, the Netherlands, Belgium, Austria, Serbia, Switzerland, Spain, Romania, Russia, Brazil, India, China, and the USA. In addition, there are more than 150 sales agencies with years of experience standing ready to advise you.



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Email · Peter.schoenbach@schneeberger.com

Website · www.schneeberger.com

Number of Employees • 1200 Founded (year) • 1923

Areas of Activity • | Medical technology

| Biotechnology | Machine tool industry

Annual Turnover · > €200m

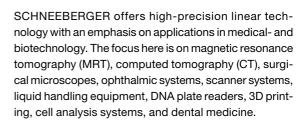
Essentials for the best – for the Medical- and Biotechnology market

In 1923 the foundations of current global linear motion technology were laid by the first linear guideways developed by SCHNEEBERGER, which has been making linear motion products for more than 90 years ago. In 1945 SCHNEEBERGER once again innovated linear technology, this time with the invention of the linear roller guide. We have developed upon this effective principle of linear guidance significantly in the last several years thanks to the integrated cage controls. The same concepts that resulted in our success still apply today: innovative spirit, an uncompromising striving for quality, and the ambition to always provide our customers with new, technically and economically superior products. Today, SCHNEEBERGER continues to be a leader, constructing linear guideways that set new standards in terms of durability, reliability, and efficiency, and has since remained at the top of a highly competitive market. The name SCHNEEBERGER is synonymous with modern linear guide technology throughout the world. At its most important production locations in Switzerland, Germany, and the Czech Republic, SCHNEEBERGER is focused on investing in constant quality increases and cost optimisations. With additional production plants in China, SCHNEEBERGER is also near to its customers in places where the markets are developing particularly dynamically. SCHNEE-BERGER is unique in the global linear motion technology market. We are an independent, medium-sized company and this forms the basis for a dynamic, customer-oriented, and correspondingly successful business strategy.

SCHNEEBERGER serves original equipment manufacturers operating (OEM) in various industries worldwide – from machine tool, medical technology and semiconductor technology to biotechnology and others. Linear bearings, profiled linear guideways, measuring systems, gear racks, slides, positioning systems, and mineral casting are all part of SCHNEEBERGER's product and manufacturing range.



SCHNEEBERGER



Precision, reliability, special designs, miniaturisation, integrated measuring systems, and application-oriented positioning systems make us the ideal supplier in these application fields.

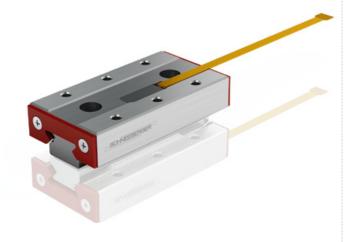
MINIRAIL is the latest generation of miniature guides for demanding applications. They are extremely robust and prove themselves in every application with their high level of smoothness, precision, and reliability.

Based on the proven MINIRAIL miniature guideway, our MINISCALE Plus, a guide with an integrated optical position measuring system, impresses with its precision, high speeds, and accelerations in the work process, low construction effort, quick installation and adjustment, consistent accuracy, and a long lifetime. These properties make the MINISCALE Plus the ideal partner in medical technology and biotechnology.













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Social Media · 🖒 in 🖸





Number of Employees · 1.050

Founded (year) · 1995

Areas of Activity • Medical and precision engineering as

well as automotive and automobile supplier industries, aerospace, hydraulics, and in pneumatics.

Annual Turnover • €350m in 2019

Schwäbische Werkzeugmaschinen GmbH (SW), with headquarters in Schramberg-Waldmössingen in the German state of Baden-Wuerttemberg, is an expanding manufacturer of internationally successful manufacturing systems. SW currently has 1.050 employees worldwide and generated sales of about €350 million in 2019.

The SW portfolio features one, two, three, and fourspindle horizontal machining centres as well as multispindle machines. The different series allow for four and five axes as well as five-axis simultaneous machining of complex metal workpieces. The range extends from precision machining of very small parts to automated loading and unloading of workpieces with maximum dimensions of 1,500 x 950 x 650 mm. As a solution supplier, SW automates complete manufacturing lines and assumes responsibility for complete process planning - from blank to finished part. The focus at SW is on the people - the Technology People - who develop and build processes and manufacturing solutions and successfully place them in operation.

Harmonious combination of productivity, precision and process control

Extending life and sustaining its quality for longer. Modern medical technology can do this thanks to the kinds of precise operating instruments manufactured on SW machines. From endoscopic device components to plastic or metal implants. Regardless if an implant milled from solid metal is a bone screw, bone plate, or knee or hip joint, SW always meets the strict industry requirements. Top precision, traceability, high productivity and flexibility come together for your success in manufacturing.







SCHWÄBISCHE WERKZEUGMASCHINEN

SW is a world market leader in multi-spindle machining centres. The company's energy-efficient manufacturing solutions are used in medical and precision engineering as well as the automotive and automobile supplier industries, aerospace, hydraulics and in pneumatics. In addition to SW Automation in Tettnang, Germany, which specialises in automation, SW also has subsidiaries in France, Italy, and Poland as well as in the USA, in China, and in Mexico.





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Website · https://si-bone.de

Founded (year) • 2008 (CE-Certification 2010)

Areas of Activity . Fusion and stabilisation of the

sacroiliac joint

Annual Turnover · Appr. US-\$67 million worldwide

External • Bauerfeind Collaborations

Advancing the diagnostic understanding of the sacroiliac joint and minimally invasive surgery for certain causes of sacroiliac (SI) joint disorders

SI-BONE was founded by Dr Mark Reiley, the inventor of kyphoplasty and the vertebral fracture treatment. Today, he is the CMO of SI-BONE. In 2009, the head-quarters for the EMEA region was founded in Italy, followed by Germany, France, and the UK.

SI-BONE's mission is to be the pioneer in offering minimally invasive solutions to treat SI joint pain by providing the innovative, patented *iFuse Implant System*®. To date, more than 50,000 minimally invasive surgical SI joint fusions have been performed worldwide with iFuse by over 2,000 surgeons.

iFuse: The Triangle-Shaped Implant Designed Specifically for the SI Joint

iFuse is the only implant for SI joint fusion surgeries with more than 80 clinical publications that include randomised and prospective long-term studies, verifying its effectivity in significantly reducing pain and improving the patients' function and quality of life. The unique patented triangle design and porous profile minimise rotation and micro movement, and allow an optimal joint fusion.

According to the National Institute of Neurological Disorders and Stroke (a division of NIH), "Americans spend at least \$50 billion each year on lower back pain." Lower back pain is the most common cause of job-related disability and a leading contributor to missed work.

Several leading orthopaedic publications over the last few years have stated that anywhere from 15–30% of all lower back pain is SI joint in origin.^{1,2,3,4,5}

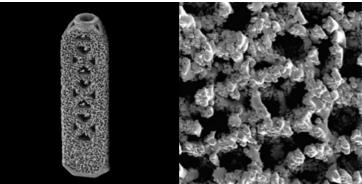
Prevalence

According to a study by Bernard and Kirkaldy-Willis, over twenty two per cent (22%) of individuals who is presented with lower back pain actually had sacroiliac (SI) joint pain. A wide variety of published clinical literature indicates that sacroiliac (SI) joint pain frequently mimics discogenic or radicular low back pain, resulting in many patients receiving lumbar fusion instead of sacroiliac (SI) joint fusion. 6

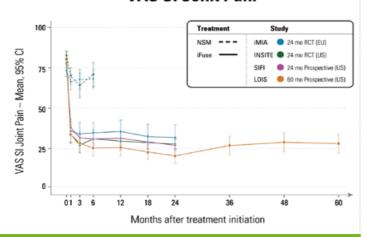


SI-BONE. | iFuse Implant System. Minimally Invasive Sacroiliac Joint Surgery





VAS SI Joint Pain



iFuse spinopelvic solutions

The iFuse Implant System® is intended for sacroiliac fusion for conditions including sacroiliac joint dysfunction that is a direct result of sacroiliac joint disruption and degenerative sacroiliitis. The lateral approach of the minimally invasive surgery (MIS) technique is performed for this procedure.

For iFuse Bedrock, the indication also includes sacroiliac fusion to augment stabilisation and immobilisation of the sacroiliac joint in skeletally mature patients undergoing sacropelvic fixation as part of a lumbar or thoracolumbar fusion.

iFuse Trauma, in addition to, the iFuse Implant System®, is intended for sacroiliac fusion in acute, non-acute, and non-traumatic fractures involving the sacroiliac joint. With its SI-University, SI-Bone is dedicated to being the market leader in offering trainings, education, and research.

Resources

- [1] Bernard CORR 1987 Bernard TN, Kirkaldy-Willis WH. Recognizing specific characteristics of nonspecific low back pain. Clin Orthop. 1987;(217):266-280. PMID 2951048.
- [2] Schwarzer Spine 1995 Schwarzer AC, Aprill CN, Bogduk N. The sacroiliac joint in chronic low back pain. Spine. 1995;20(1):31-37. PMID: 7709277.
- [3] Maigne Spine 1996 Maigne JY, Aivaliklis A, Pfefer F. Results of sacroiliac joint double block and value of sacroiliac pain provocation tests in 54 patients with low back pain. Spine. 1996;21(16):1889-1892.
- [4] Irwin Am J Phys Med Rehabil 2007 Irwin RW, Watson T, Minick RP, Ambrosius WT. Age, Body Mass Index, and Gender Differences in Sacroiliac Joint Pathology. Am J Phys Med Rehabil. 2007;86(1):37-44. doi: 10.1097/ PHM.0b013e31802b8554D.
- [5] Sembrano Spine 2009 Sembrano JN, Polly DW. How often is low back pain not coming from the back? Spine. 2009;34(1):E27-32. doi: 10.1097/ BRS.0b013e31818b8882.
- [6] Weksler Arch Orthop Trauma Surg 2007 Weksler N, Velan GJ, Semionov M. Gurevitch B. Klein M. Rozentsveig V. Rudich T. The role of Sacroiliac (SI) Joint dysfunction in the genesis of low back pain: the obvious is not always right. Archives of ortho and trauma surgery. Arch Orthop Trauma Surg. 2007 Dec;127(10):885-8. Epub 2007 Sep 8. DOI: 10.1007/s00402-007-0420-x.



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Social Media • in

Number of Employees · 354

Founded (year) · 1995

Areas of Activity . | Solar

| Life Sciences

SINGULUS TECHNOLOGIES

Wet chemical and vacuum deposition for medical technology

For medical technology SINGULUS TECHNOLOGIES offers innovative wet chemical and vacuum deposition process solutions.

Wet processing systems

Batch & inline systems as well as customised solutions SINGULUS TECHNOLOGIES presents with its MEDLINE platform a modular system for wet chemical applications adaptable for different process applications. Contact lenses and dental implants are only two examples for the applications. The spectrum ranges from manually loaded wet chemical tools for R&D applications to fully automated platforms for high volume mass production in demanding technologies.

Typical examples for wet chemical processes:

- · Washing, cleaning, and pre-cleaning
- · Ultra- or megasonic cleaning
- Surface conditioning
- · Coating, etching
- Surface modification
- · Electrochemical etching

Vacuum deposition technology

Sputtering & plasma-enhanced chemical vapour deposition

For medical technology, SINGULUS TECHNOLOGIES offers processes and equipment for coating technology (PVD sputtering, evaporation, PECVD, CVD). A common trait of all processes is the basic principle of efficient, low-resource production technology.

Certain frequently used surfaces such as door handles, elevator buttons, shopping trolley handrails, and light switches, as well as masks, pose a considerable risk of transmission of bacteria, viruses, and fungal cultures. One way to reduce the risk of infection lies in the use of specially coated products with a permanently antibacterial and antiviral surface with copper. Copper-containing









SINGULUS TECHNOLOGIES

alloys are ideal for surfaces and objects that are frequently touched, as copper is able to greatly reduce MRSA bacteria between regular cleanings. A German institute confirmed that the PVD sputtered copper alloy layer developed by SINGULUS TECHNOLOGIES reached a strong reduction factor in the bovine CORONA virus. Furthermore, this copper alloy layer has also a strong antibacterial activity with the test strains Staphylococcus aurous ATCC and Escherichia coli ATSS 8739.

SINGULUS TECHNOLOGIES offers the production system POLYCOATER, which applies copper functional layers in a vacuum coating process (sputtering). The fully automated production system allows for a costefficient production process for such tasks. The complete production line DECOLINE II integrates vacuum metallisation together with automatic transport of the parts to defined transfer positions. In combination with basecoats, the coating is used for the additional finishing of two- or three-dimensional components of different characteristics. The cycle time per carrier is only six seconds. Through the use of UV-lacquers and the ability to recycle these, the output of environmentally burdening emissions is minimised. The environmentally friendly, flexible process thus offers a real alternative to traditional batch processes.

Possible application examples for medical devices are:

- Antibacterial coatings
- Dense barrier layers, gradient layers
- Antireflection coatings
- Hard coatings
- Adhesion-promoting layers
- Plasma functionalisation
- Plasma cleaning, plasma sterilisation
- Decorative coatings

SINGULUS TECHNOLOGIES pursues an integrative validation strategy and supports customers in the validation of machine technology. A corresponding quality management system has been adopted at SINGULUS TECHNOLOGIES. This serves to guarantee product quality and meets the binding marketing requirements of health agencies.



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Social Media · in X

Number of Employees - 300

Founded (year) · 1991

Areas of Activity • | Medical technology

| Automotive

| E-mobility

| Electrical engineeeering

| Electronics

| Renewable energies

Annual Turnover · €50m (2019)

Experienced system partner for medical technology

As an OEM, SITEC Industrietechnologie develops, manufactures, and delivers production systems world-wide for its customers and produces modules and components on a series scale for medical technology. To meet the specific requirements of medical technology, SITEC offers its customers comprehensive engineering expertise and many years of experience in the laser machining of materials, electrochemical machining, and automated assembly.

The range of materials that can be machined encompasses everything from steels and stainless steels to non-ferrous metals, such as titanium, Nitinol, aluminium, and copper, to various plastics and glass.

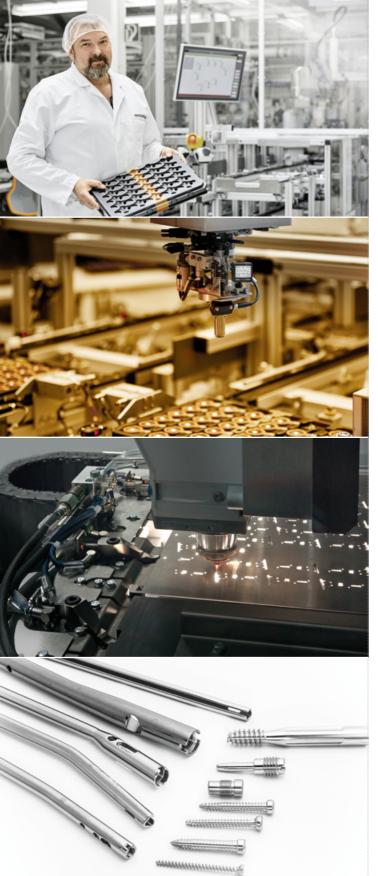
Laser machining of materials

Laser technology makes the high-precision, efficient machining of medical devices possible. The range of technologies includes laser welding, fine laser cutting, and laser hardening of extremely small local surfaces, as well as 3D micro-drilling, micro-structuring, and micro-removal. SITEC uses various laser-beam sources for this, such as CO₂, diode, fibre, disc, or ultrashort-pulse lasers, based on their optimal suitability for particular applications. Ultrashortpulse lasers are opening up brand new possibilities for ultra-precision machining in the micro-metre range, even for temperature-sensitive materials. Our experienced team of application engineers and designers will be happy to support you in the technological development of your products.

Electrochemical machining

Electrochemical machining (ECM) and its process variants offer maximum reliability and are particularly recommended for the manufacture of medical devices with above average requirements for quality and customer confidence, such as implants. Key applications include the deburring of drill cuts and defined chamfering. We can carry out sample machining at our application centre to show you the capabilities of the process.





Assembly technologies

The automation of assembly processes is our speciality. You can rely on our many years of experience in the automation of assembly processes and assembly technologies as well as the integration of testing processes, intelligent image processing, and laser processes. All assembly processes are controlled, ensuring 100% traceability.

Mechanical engineering

We develop and produce reliable production systems for flexible manufacturing in accordance with customer requirements and industry standards. Our portfolio covers everything from partially to fully automated assembly, laser, and ECM systems. Services for our customers include system planning, project management, design, production, and assembly.

A multi-stage process is used for preliminary acceptance (factory acceptance test - FAT) of the systems at SITEC and after delivery and recommissioning at our customer's location (site acceptance test - SAT). We provide professional support for the further validation process (PQ, IQ, OQ) through to the market release of your products.

Our service employees and worldwide partners in Europe, Asia, and America ensure you have access to fast, competent service at your site.

High-performance series production

Alternatively, SITEC offers you a ramp-up or series production on its in-house facilities and in certified quality. Our extended services include component assembly and pre- and post-treatment of parts. We use an IATF, compliant quality-management system attuned to the requirements of medical technology.



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Business MarCom Manager

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Email · s.koban@staubli.com

Website · www.staubli.com/en/robotics/

Social Media · ₩ In X 🗅 🏵
Number of Employees · 5,500

Founded (year) · 1892

Areas of Activity • | Industrial automation

| Industrial robots

| Life sciences

| Medical technologies

Robotics solutions for medical industry

Stäubli Robotics is a leading global player in robotics, consistently delivering engineering as effective and reliable as our service and support. In order to position itself as a complete solution provider for digitally networked production, Stäubli offers beyond a broad range of standard kinematics of 4-axis and 6-axis robotic arms even for all kind of sensitive environments, autonomous mobile robotics, driverless transport systems (AGVs) as well as POWER cobots for human-robot-collaboration.

For many years now, Stäubli Robotics has been on a mission to develop robots for life sciences applications. Stäubli robotics arms are setting the benchmark for hygiene, safety, and productivity for all production conditions in the clean to sterile range.

Whenever speed and accuracy have to be maintained alongside factors such as particle emissions, easy-to-clean surfaces, and availability, robots from the house of Stäubli have long led the way. With its specialised robotic arms, Stäubli brings its unique robotics expertise to the table in all medical device manufacturing operations, from deburring and polishing the surfaces of orthopaedic implants to injection moulding medical components, assembly, and handling medical and optical instruments.

Their superior cleanroom suitability results from a fully enclosed design; a prerequisite for use in these sensitive areas. In addition to the cleanroom-compatible standard robots, there are numerous dedicated cleanroom variants, wet room versions, and Stericlean robots to choose from.



STÄUBLI TEC SYSTEMS

Six identical Stäubli Stericlean robots handle the

implants. Shown here is the chemical treatment station.



The entire medically certified system operates under cleanroom conditions and is housed in a 40ft module.

Made for medical: Stericlean robots

Texere Biotech has recently begun production at a fully automated plant, the first of its kind in the world, using six Stäubli Stericlean robots. The company uses femoral heads and processes them into cuboid implants known as "bone allografts". Its output is significantly higher than that of other providers who still rely on manual production methods. The result is microporous decellularised bone blocks in the standardised size of a sugar cube, which experience has shown will knit very well with another patient's bone material without causing rejection, as they contain no stem cells.

With the capacity to process 5,000 femoral heads a year, the six identical TX60 Stericlean robots are positioned at six stations along the processing line. The first of them lifts one whole femoral head off a tray and conveys it to an image processor which assesses it for size and shape. This data is used to map out the cutting lines for the next stage, in which the second robot presents the bone material to the fully encapsulated water jet machine. In contrast to sawing or milling, this does not generate the sort of high temperatures that might destroy natural bone properties and eliminates all risks of cross-contamination between femoral heads.

Robot number three retrieves the resulting cuboid allografts and places them on a tray. The next two robots in line are responsible for handling the allografts as they undergo chemical treatment and sterilisation. At station number six, the last of the Stericlean robots inserts the individual cubes into vials. After they have been vacuumsealed and individually labelled, the vials are stored at ambient temperature pending delivery to hospitals.

Benefits

- Increased efficiency and overall capacity
- Reproducible quality at the highest level
- No contamination, including cross-contamination
- Prevention of errors caused by manual work



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Founded (year) · 1949

Areas of Activity • | Pharma/Medtech packaging

| Plug&Pack

| Automationsystems

Cleanroom packaging protects against contamination

Cleanroom production and packaging are a very important issue because the primary packaging has to preserve the product and process quality. Primary packaging for pharmaceutical and medtech products needs to meet the highest quality requirements. Hygiene and cleanliness are basic properties for plastic packaging materials. STRUBL Packaging has installed a highly professional cleanroom manufacturing process for cleanroom packaging materials based on ISO 14644.

Cleanroom production based on ISO14644 has become the standard for all markets that have to meet the highest requirements in hygiene and cleanliness, e.g. the pharmaceutical, medtech, lifesciences, and healthcare industries. These products are covered by continous quality management monitoring. This applies to active pharmaceutical ingredients (API) as well as plastic devices and components, implants, instruments, tubes, inhalers, valves, application tools, and numerous products used for laboratory applications and testkits.

Before leaving the cleanroom environment, these products have to be packaged to avoid any damage and contamination during subsequent handling and transportation operations. Therefore plastic packaging materials are the suitable solution. Plastic packaging materials such as bags, side-gusseted bags, zipbags, covers, films, and tubes are used in every step of the cleanroom process value chain as primary packaging materials.

Cleanroom packaging - the best way to avoid contamination

To be sure, that the primary packaging meets the cleanroom requirements, these packaging materials have to be produced in a suitable cleanroom environment as well. Special risks have to be checked:

- raw material risks: migration between packaging material and product
- process risks: particle emission during the handling process





- logistic risks: packaging specifications
- product risks: sealability, seal strength, non-leaking seals

STRUBL cleanroom packaging

All products can be customised: the customer specifies dimensions and packaging requirements, such as labelling, as well as raw material conformities e.g. foodgrade/ medicalgrade/pharmagrade. All products are suitable for gamma irradiation. If needed all products can be designed with antistatic surfaces.

cleanzip - zipbags in cleanroom quality

STRUBL has developed a cleanroom zipbag. These reclosable bags are used for numerous applications, but until now these standard bags were not available in cleanroom quality. Cleanzipbags can be used for laboratory applications such as sampling, archiving, and intermediate packaging. Cleanzipbags are manufactured in a GMP-based production system and meet the high requirements of pharmaceutical applications required by the GMP guidelines.

bag-in-bag - bagsystems

"Bag-in-bag systems" are systems that combine two or three bags. The bags are already placed within one another to simplify the packaging process for the customer. Thus the customer reduces their packaging efforts: with one single packaging process, both primary and secondary packaging are fulfilled. This reduces excessive handling and the risk of damaging the products.



Name • T4M - Technology for Medical Devices (a product of Messe Stuttgart)

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Social Media · www.twitter.com/T4Mexpo

Founded (year) · 2019

Areas of Activity . Trade fair, specialist forums,

workshops, networking opportunities, and the largest start-up area of medical technology trade fairs

Collaborations

External • | VDMA Working Group Medical Technology **I SWISS MEDTECH**

> | Medical Mountains ... and many more

About T4M -**Technology for Medical Devices**

From 04-06 May 2021, T4M - Technology for Medical Devices will once again serve as a central meeting place for the medical technology industry, bringing together a trade fair, lecture forums, workshops, and networking opportunities. Come to Stuttgart to discover new technologies, innovative processes, and specialised materials for the production and manufacturing of medical technology. T4M is interesting both for manufacturers as well as the entire supply industry of medical technology. At the exhibition area development and production managers, engineers, and purchasers, as well as scientists, will find the latest technologies from the industry. In order to ensure the greatest benefit for visitors and exhibitors, Landesmesse Stuttgart as the event organiser is working closely with companies and associations from the medical technology sector from Germany and other European countries. The promotional supporters of the trade fair are the VDMA Medical Technology Working Group and the Swiss Medtech industry association.

In 2021 well-known companies will be exhibiting, such as Admedes, EPflex Feinwerktechnik, Fraunhofer IPA, Fort Wayne metals, FOBA Laser Marking + Engraving, melitek, MS Techniques, Chiron-Werke, Vascotube, Wild & Küpfer und Röchling Medical Waldachtal.

At the premiere in 2019, 254 exhibitors presented their innovations over three successful days. 3,163 visitors were able to experience exciting presentations by 178 speakers on three stages. There were also four workshops, as well as the T4M Start-Up World with 55 startups and much more.

Further information can be found at www.T4M-expo.com



About Messe Stuttgart

We bring people together. Located in the heart of Europe, Messe Stuttgart is the central hub for ideas and contacts.

World market leaders from every industry meet mediumsized hidden champions and exciting start-ups here. Interesting cooperation agreements and new lines of business are therefore established at our trade fairs, congresses, and events. In direct exchange, without any diversions. 12 per cent of the up to 1.36 million visitors come from abroad to the trade fair centre directly beside Stuttgart Airport. Messe Stuttgart serves its customers in 52 countries with three subsidiaries, 19 foreign representations, and numerous sales partners.

TesT

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Number of Employees · 30

Founded (year) · 1994

Areas of Activity • | Force, torque, tension, compression. bending forces, torsion

| Screw and bolt testing M1 to M80

| Materials and component testing

| Mechanics and micro-mechanics

| Medical technology

| Dental implant technologies

I Bone implant technologies, artificial ioints

| Medical instruments

| Pharma Industry

| Medical packaging, foils, bandage material

| DIN EN ISO 13485

| FDA 21 CFR Part 11

| GMP. IQ / OQ / DQ / PQ

| Various other industries and

applications

Collaborations

External • | TesT LTD, Switzerland

| TesT-Systems, Spain

| Representatives on all continents; see website

Member of



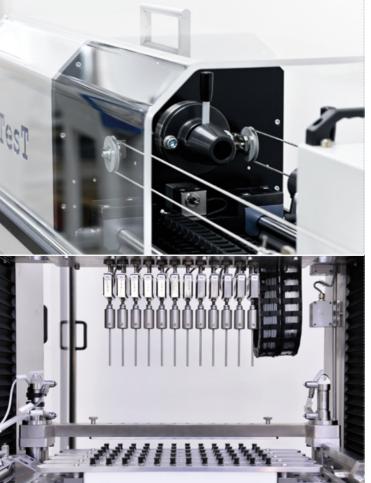
TesT is one of the leading manufacturers of testing machines, contributing decisively to research and quality assurance cross-industry, worldwide. TesT has extensive experience in MedTech and Pharma, meeting all standards and norms, e.g. accreditation in DIN EN ISO 13485.

Innovation highlights

Dental Implants Tester 210.10Nm

TesT has developed a torsion testing machine for the screwing-in of dental implants. Dental implant manufacturers need to examine surface roughness and coatings to achieve greater fastening strength and durability and to improve bone healing. During testing, implant bodies are screwed into artificial bones in order to monitor the torques of the self-tapping thread. With the related software, the testing machine can be programmed via USB on any standard PC, tests can be evaluated, and reports generated. The machine applies a torque of up to 10 Nm with a maximum rotational speed of 100 rpm, but up to 3000 rpm can be realised in this size. Several torque transducers with different measuring ranges can be used interchangeably, automatically recognised by the software. They can be moved axially on the slide by 500 mm as standard. Highprecision linear guides guarantee coaxiality, concentricity, and axial runout between torque introduction and torque measurement of only a few µm. A solely torquetransmitting force support protects the transducers from disturbing influences. This means, that even heavy test pieces or collets can be used. Special features of a custom-made device: three different transducers with the nominal torques 10 Nm, 5 Nm, and 1 Nm, each with an accuracy class of 0.1, able to measure torques of a minimum of 0.02 Nm with an error of 0.1% using the smallest transducer. Even smaller measuring ranges can be achieved.





Dental Instruments Tester 210S.5Nm

Another dentistry application is the testing of root canal instruments. Here, the special approach of TesT is to combine torsion and bending testing in one system. For this purpose, TesT has developed a controller which regulates up to three drives simultaneously to ensure a constant axial preload.

Cartridge Gliding Tester 122S.10kN

An automatic testing system for cylinder cartridges is more relevant than ever. The system checks the cartridges during production and continuously documents all data. About two thousand filled cartridges can be tested at the production site daily, simulating the injection. When the piston begins to move into the cylinder, the breakaway force must not exceed a certain value. While the liquid is being ejected, the system measures the occurring frictional forces. After half of the ejection, the machine stops for a few seconds to again monitor breakaway force and slip for the remaining stroke. The leak tightness of the cartridges is confirmed by a subsequent load test. If a test specimen is not functioning correctly, a signal will sound, and a protocol will automatically be generated. Syringes and cartridges are ubiquitous medical devices. Yet their perfect function and leak tightness can only be guaranteed by quality controls.

The associated software TesTWinner® can be validated according to FDA Title 21 CFR Part 11.

The expertise of German engineering, the experience of an established manufacturer, and the innovative spirit of a young generation of entrepreneurs - that's TesT. We help you to make your products even better. Meet the experts for custom-built testing machines and find the best solution for your testing challenge.



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State · Bavaria

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Website · www.tradex-services.com

Number of Employees • 5 Founded (year) • 1998

Areas of Activity · Exhibitions

Tradex-Services – Your full event service provider

As a highly specialised and well-established firm we are supporting companies from Germany, Austria, and Switzerland to grow their business presence worldwide – both physically and digitally.

Therefore, we are collaborating with some of the largest exhibition organisers and we are procuring floor space at many globally renowned trade shows to offer exhibitors the comfort of showcasing their companies' capabilities easily and stress-free within our custombuilt pavilion, individually or as part of an official national / state pavilion. In addition to our basic services Tradex^{fairs} and Tradex^{pavilion}, based on our 20+ years of experience and the current business climate, we have developed unique digital tools to further enhance your company's presence on a global scale:

- Virtual Fair Combine virtuality with reality
- Tradex* Stay connected all the time
- · Virtual Fair Stav visible all the time
- Tradex^{app} Your mobile event companion

Our interlocking tools, know-how, high level of customer service, and carefully selected partner network are constantly at your service to ultimately provide you with the best support your company deserves – so you can fully concentrate on developing your business network and lead generation, resulting in a healthy ROI.

Virtual Fair+

Virtual Fair – A smart solution for tomorrows standards, this tool helps prepare exhibitors to always be one step ahead. A combination of several smart applications that support Marketing / Networking / Promotion / Advertising platforms, our service takes international business development to a whole new interactive level.

Fully customised vBooths can be created, enabling you to present your products and services for specific regions and specific target groups: worldwide – 24/7/365. A blend of several interactive communication tools, including video calls, live chat, and screen sharing directly on your vBooth. All products / services can be linked to any relatable content that will assist in the sales



process, including webinars, tutorials, catalogues, social media, etc... In addition to this, we offer an integrated "Business Appointment Scheduler" which helps you to optimise your time at a live event by coordinating your meetings.

Tradex⁺

Tradex+ - "Your Marketing and Networking platform" helps you to stay connected and promotes your company 24/7/365. Share up to 50 product and service pictures, videos, detailed descriptions, and downloadable catalogues on a media-rich profile. Add social media links and personalised team contact information to your profile to streamline your business activity. Tradex+ is the foundation for all of our interactive digital services.

Virtual Fair

Virtual Fair – "Your Promotion and Advertising platform" supports you to stay visible all the time and provides you with a unique opportunity to announce your exact stand location at a specific trade show, further increasing your exposure, so your clients will always be able to find you during the show and you avoid missing business opportunities. Virtual Fair obtains all information from Tradex⁺ and feeds your Tradex^{app} entry with all necessary information.

Tradexapp

Tradex^{app} – Your mobile event companion combines all features of Tradex+, Virtual Fair, and Virtual Fair+ which enables you and your clients to stay in touch at all times. The app, available for iOS, android smart phones, and tablets, qualifies anyone to interact with you beforeduring-after each show being held. Integrated search functions to check for profiles, products, etc. are linked to our Virtual Fair List and Company List.

Additionally a Route-Planner and Appointment Manager helps you to organise and to coordinate your events.

Partners

Tradex-Services has established an exclusive partner network with highly specialised business associates who will help you to meet your businesses, trade show management, and exhibition needs.



Name • TRUMPF

Laser- und Systemtechnik GmbH

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State · Baden-Wuerttemberg

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Website · www.trumpf.com

Social Media · in

Number of Employees • 14,300

Founded (year) · 1923

Areas of Activity • TRUMPF is a technology and market

leader in highly versatile machine tools for sheet metal processing and in the

field of industrial lasers.

Annual Turnover • €3.5bn

TRUMPF was founded in 1923 as a series of mechanical workshops and has since then developed into one of the world's leading companies for machine tools, laser technology, and electronics for industrial applications. The company's mission is to further develop and digitally connect production technology, to make it even more efficient, precise, and future-proof. In doing so, TRUMPF works towards making manufacturing and its upstream and downstream processes more efficient. TRUMPF's software solutions pave the way to the Smart Factory, allowing companies to implement high-tech processes in industrial electronics.

The family company is headquartered in Ditzingen near Stuttgart, Germany and is represented by over 70 subsidiaries in all of the world's leading markets. Production facilities are located in Austria, China, the Czech Republic, France, Great Britain, Italy, Japan, Mexico, Poland, Switzerland, and the United States.

Expert in laser technology

The product portfolio of TRUMPF starts in the range of low-power lasers for e.g. marking and ends up with multi-kilowatt systems for the chip-producing industry. Between these poles a large variance in power, pulse length, wavelength, and beam quality can be offered. No matter if it is cutting, welding, cleaning, or marking of stainless steel, aluminum, copper, or plastics – there is a laser for each application. Furthermore, a large variety of machine systems is available.

TRUMPF is a strong and reliable partner for medical technology companies, mainly in the fields of laser marking, laser cutting, and laser welding, but also in metal 3D printing. Long-term success within the market is based on high-end technical solutions and a strong drive for innovation.

Laser marking

Laser marking is a process that has become indispensable when applying UDI codes. Nevertheless, every material needs the right laser to apply high-quality markings. For instance, the integration of pico- and femtosecond lasers into marking systems enables the so-called black-marking process. This process is used to create durable, long-lasting UDI markings on metal











surfaces - a mandatory requirement for the medicaldevice production. In addition, TruMark systems also realize processes related to the actual marking, such as quality control through image processing or communication with databases.

Laser welding + Laser cutting

The joining of complex products requires highly reliable manufacturing methods. The TRUMPF laser welding systems enable a broad range of benefits in precise and repeatable 3D laser welding of assemblies such as medical instruments. The large variety of welding optics and laser sources allows the optimal configuration for individual production demands. Implemented image processing and monitored laser power ensure consistently high-quality process results.

As a pioneer in laser cutting, TRUMPF offers sophisticated and robust technology for 2D and 3D cutting applications. Thanks to excellent precision and dynamics, even the smallest workpieces and devices can be processed without compromising on the high demands for quality and productivity.

Metal 3D printing

3D printing is shaping the future of industrial production. Metal 3D printing with TRUMPF offers the possibility to create a completely new product right from scratch that fulfills the quality standards. Starting with loose metal powder, our TruPrint machines can economically print orthopaedic devices, CMF implants, tooling inserts for the manufacturing of disposable products, or any other devices. In addition, further developments of in-line process monitoring and process automation make the technology even more reliable and reproducible.

To satisfy the high demands of medical technology, TRUMPF Laser- und Systemtechnik GmbH not only offers turnkey solutions including consulting and application support, but also provides expert advice in industry-specific topics such as equipment qualification. Together with its customers, TRUMPF acts as a solution provider with a strong focus on future trends and development projects.

Get in touch at www.trumpf.com



Name · TYROLIT

Schleifmittelwerke Swarovski KG

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Country · Austria

Telephone • +43-5242-606-0 Website · www.tvrolit.com

Social Media · 🖒 🏏 in 🖸 🖸

Founded (year) · 1919









Number of Employees ⋅ > 4,500

Areas of Activity . Grinding and dressing tools for:

| Automotive industry

| Construction industry

| Foundry industry

| Bearing industry

| Medical technology

| Quartz industry

| Steel industry

| Precision industry

| Aviation & turbine industry

| Tooling industry

| Transmission industry

Annual Turnover · €685m (2019)

The TYROLIT Group

TYROLIT is one of the world's leading manufacturers of grinding and dressing tools as well as a system provider for the construction industry. Since 1919, our innovative tools have made an important contribution to the technological development in many industries.

TYROLIT offers tailored grinding solutions for various applications, as well as a comprehensive assortment of standard tools for customers all over the world. Headquartered in Schwaz (Austria), the family-owned business combines the strengths of being a part of the dynamic Swarovski Group with over a century's worth of experience. A passion for technology and a strong innovative spirit have been incorporated into the manufacture of high-quality grinding solutions.

The company strives to impress internal and external target groups and to cultivate fair, long-lasting cooperation based on partnership. To this end, the quality of products and services is continually optimised and business processes constantly adapted to the changing demands of the market.

The development of a new grinding wheel is either a response to a customer need or initiated internally in the company if an idea has the potential to improve specific tool characteristics. Such developments can be driven by new technologies, materials, and production processes or a change in general market conditions. No matter where an idea comes from, TYROLIT will strive to always find the ideal grinding tool for any application.

The challenge when developing new grinding tools starts with the selection of the raw materials, continues to the development of cores and bond systems, and ends with high-precision production based on customer-specific requirements. The dedicated Research & Development employees have been making technological history with numerous innovations and more than 500 patents worldwide.

TYROLIT's global supply chain management ensures on-time delivery of products to customers around the





world. Investments in research and development, in training employees, and in technological improvements are integral parts of the TYROLIT corporate culture.

The trend of an ever-aging society has increasingly brought medical advancements and medical technology into the spotlight. At the same time, the demand for "spare parts" and implants for the human body is increasing in order to maintain the quality of life into old age.

Due to the requirement for precision and small tolerances in this industry, manufacturers look to their reliable and experienced partners.

In knee joint grinding TYROLIT offers a lightweight core made of natural fibres, which allows for a significant weight reduction. The N-LW (natural lightweight) core is not only lighter and more cost-effective, but also offers positive damping characteristics. In grinding femur components the use of superabrasive grinding tools is the industry standard and TYROLIT manufactures a doublelayered disc with a high abrasive layer and special shape that can be used for processing over the full 20 mm.

For the machining of hip joints TYROLIT offers a selection of various resin and vitrified bonded grinding and polishing sleeves. The productivity of the manufacturing process can be increased by using conventional or superabrasive grinding tools adapted to the respective application. For example, by using superabrasive tools, the cycle times for pre-grinding could be reduced from 10 minutes to 1 minute.

A third pillar of TYROLIT's medical technology portfolio is the processing of surgical instruments. An updated range of grinding and finishing tools is used for a variety of finishing processes. For more safety during surgical procedures, scalpels are sharpened with TYROLIT COOL CUT discs and finished with elastic or non-woven tools. thus guaranteeing the highest surface quality.

TYROLIT, a household name in all abrasive applications, offers customers also a dedicated application engineering support for the optimal use of its abrasive tools.



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Website · www.vargus.de







Number of Employees · 500

Founded (year) · 1960

Areas of Activity · Cutting tools for:

| Medical and Dental

| Automotive

| Aerospace

| Energy

| Oil & Gas

VARGUS

VARGUS is a world leading developer, manufacturer, and supplier of high-quality, precision threading, grooving, turning, parting-off and hand deburring tools. Established in 1960. VARGUS is the cutting tools division of the NEUMO Ehrenberg Group, a multinational organization headquartered in Germany. With 13 international subsidiaries, a network of distributors, warehouses, and certified ISO 9001 manufacturing facilities. VARGUS serves customers in more than 100 countries around the globe. VARGUS is committed to providing products and solutions of the highest quality and excellent value. Vargus Deutschland GmbH offers necessary technical support for our customers to find the best tools, optimal cutting conditions, and to improve quality and efficiency. A comprehensive range of stock is available for same-day delivery in addition to our facilities for manufacturing special tools.

Introducing VARGUS solutions for the medical industry

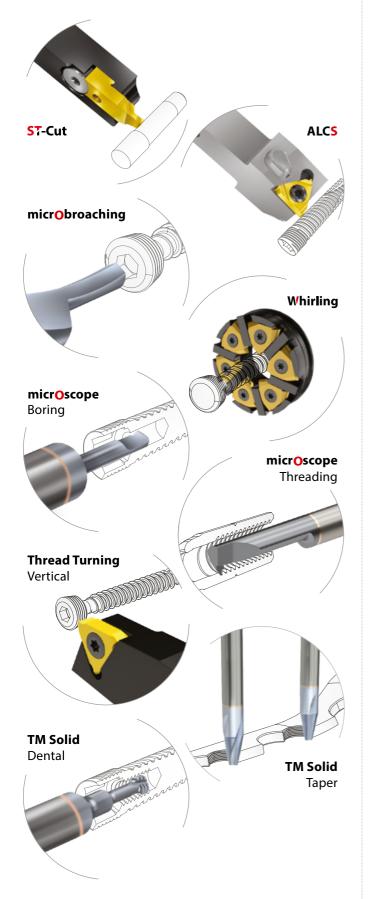
Keeping up with the demands for mass production and special tooling for the Medical Industry, VARGUS provides an encompassing range of solutions for the precise and detailed applications used in this rapidly growing industry. Whether it be the manufacturing of miniature dental implants, bone screws, bone plates, tulip heads, or other exact medical components, our precision tools provide you with the excellent VARGUS quality so well known in the metal-cutting industry. Biocompatible Titanium and Stainless-Steel are the most common materials used in the medical industry. With the VARGUS knowledge and experience, our skillful engineers developed advanced grades highly suitable for the strict requirements of medical applications.

Vargus solutions for the medical industry ST-Cut Swiss-type tools

An innovative solution for machining small parts on Swiss type machines. Includes parting off, turning, grooving, and threading:

- Quick change of the insert inside the machine
- High repeatability of the cutting edge on all axes
- · Cutting edge treatment for increased tool life





ALCS - thread turning toolholders

External thread turning toolholders for Swiss type machines with high pressure coolant:

- Right, left, back and bottom coolant inlets
- Two precise high-pressure coolant outlets
- Longer tool life and better chip evacuation

MicrObroaching

A modern design of broaching for Medical Industry requirements:

- Unique design for improved stability
- Fits popular driven tools
- Standard items for Hexagon & Torx

Whirling

For efficient machining of bone screws and dental

- Fast machining with improved tool life
- Fits popular driven tools
- VARGUS threading quality

MicrOscope

Micro machining solutions for boring, grooving, profiling, chamfering and threading in bores as small as 0.5mm:

- Chip breaker and coolant thru available
- Shrink holder for increased stability

Thread Turning - vertical

- Slim throat holders for tight spaces
- Multi tooth available

TM Solid - thread milling

A very large variety of solutions of solid carbide thread mills including:

- Taper tools for bone plates. Straight and helical flutes available
- Reinforced throat for dental implant

VARGUS is your ideal partner, offering a wide selection of solutions for the most common dental and orthopaedic machining applications.

Follow us on social media and subscribe to our newsletter: vargus.de/newsletter



Name • Viscofan BioEngineering

– a business unit of

Naturin Viscofan GmbH

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State · Baden-Wuerttemberg

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Website · www.viscofan-bioengineering.com

Social Media · in

Number of Employees • 10 Founded (year) • 2008

Areas of Activity • Development and manufacturing of

collagen products for regenerative medicine biomedical R&D nutraceuticals

External Collaborations

External • | University of Tübingen

| University of Navarra (Spain)

| Fraunhofer Institut IGB

l Hospital Gregorio Marañón (Madrid)

I FC BarcelonaI VASCage GmbH

Your partner for medical collagen in regenerative medicine

Viscofan BioEngineering is a business unit of Naturin Viscofan GmbH – the centre of excellence for collagen within the Viscofan group, a global leader in collagen production.

Building on 85 years of experience in industrial-scale bovine collagen production for the food market, we use this extensive know-how to develop advanced solutions for the biomedical sector. The goal of our collagen portfolio is to facilitate cell biology research and to ultimately enable the development of novel therapies in regenerative medicine.

Unique collagen scaffolds for a wide range of applications

As an essential structural component of the extracellular matrix, collagen type I provides a scaffold to support cell attachment and function as well as organ integrity. What sets our collagen matrices apart is firstly the intense yet gentle purification of insoluble collagen type I fibres, which preserves their native and complex structure, resulting in high biocompatibility and mechanical strength. Secondly, we shape the collagen fibre mass into customisable scaffolds with unique properties that are ideal for applications in tissue engineering, regenerative medicine, and medical device technologies.

Collagen membranes as biodegradable cell support for tissue regeneration

Extruded to flat membranes, the dense network of long collagen fibres provides strength and flexibility to create versatile, biodegradable supports for tissue regeneration. For customisation, we adjust thickness, tensile strength, elasticity, biodegradation time, and other properties to optimally serve diverse applications such as advanced wound healing and urethra or hernia repair.

Our Collagen Cell Carrier® (CCC) is a native matrix for adherent primary cells, cell lines, and stem cells for in vitro and in vivo use. The standardised thin (20 µm) and elastic, yet strong membrane is especially suited as a







biological vehicle for cell implantation. An innovative tool for the development of ATMPs, its use as a stem cellloaded cardiopatch for the treatment of cardiomyopathy is currently being evaluated in a phase I clinical trial.

Viscolma® collagen mass for coating of medical devices

As a smooth fibrous mass with concentrations of up to 15% collagen, Viscolma® can be used for individual research applications such as the development of 3D cell culture scaffolds. Moreover, the putty-like mass is especially suited for the biocompatible coating of implantable medical devices.

Soluble collagen for cell & tissue culture research

Our soluble collagen is used for thin coating of cell culture vessels and as a hydrogel for 3D cell and tissue cultures, promoting authentic cell performance.

Certified manufacturing - safe products

We start our medical grade production with traceable bovine raw material from New Zealand, a country with negligible BSE risk. Our collagen membranes and Viscolma® are provided both in R&D and medical grade quality, the latter manufactured in our GMP-compliant production unit. Viscofan BioEngineering is certified according to DIN EN ISO 9001 (Quality management systems) and DIN EN ISO 13485 (Medical device quality management systems) certification is pending. This ensures the highest possible product safety for all medical products.

Enabling breakthroughs in regenerative medicine

Provided both in research and medical grade quality, our collagen products permit easy and cost-efficient benchto-bedside transfer. Moreover, together with our partners, Viscofan BioEngineering is also developing its own pipeline of products in regenerative medicine. With the combination of premium products, our all-round know-how in collagen manufacturing, and expert customer support, Viscofan BioEngineering promotes new breakthroughs in medical development and is open to collaborations.



Name · Weber Instrumente GmbH & Co. KG

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State · Baden-Wuerttemberg

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Social Media · 🔏 🕞

Founded (year) · 2000

Areas of Activity • | Design and manufacturing of

surgical instruments

| Medical grade silicone molding

| Customer focused process development

How our employees see us

As a leading technology and service company, we are geared towards customer-oriented growth and new technologies in the medical technology sector.

We stand by Germany as a business location.

Our team masters the processes, documentation, and regulations in order to further increase the sustainability of our company.

Our customers receive all the information they need to fulfil the MDR

As a contract manufacturer, Weber has made it our business to pass on all necessary information to our customers in order to facilitate their access to the medical device market in the best possible way. To this end, Weber supports our customers with all information from the manufacturing process, but also from our extensive repertoire of cleaning and sterilisation validations.

Process control

All manufacturing processes are regularly checked for possible risks via pFMEA. In addition, all auxiliary and operating materials are specified for each manufacturing process, and non-verifiable processes are validated.

In order to make this information available to the customer in a timely manner for a wide range of products, Weber invested in database systems at an early stage and can now make this information available in granular form across the entire product manufacturing process at the push of a button.













weberinstrumente













download our product catalog

SoftGrip - the original More patient safety

As manufacturer of the original SoftGrip handle for surgical instruments, Weber can produce a large number of products. Our modular design allows us to adapt handles of screwdrivers, chisels, curettes, or flexible coupling systems, among other things.

But flexibility is not the only advantage. The SoftGrip handle is durable and has particularly good cleaning properties, which Weber has been able to prove in various tests. It is therefore far superior to plastic handles, which have already been recalled extensively from the market in the past due to gap contamination.

Complete systems for your implant

Through many years of experience Weber has developed into a supplier of complete instrument systems. Weber not only uses our own designs, but also offers customers the possibility to specify their own shapes for silicone handles and thus present their trademark appearance. Thanks to lean digitised processes, Weber is able to dramatically reduce the time from the first batch.

WIRTHWEINMEDICAL

Name · Wirthwein Medical GmbH & Co. KG

Address/P.O. Box • Bahnhofstrasse 80 Postal Code/City • 64367 Mühltal

State · Hesse

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Email • info@wirthwein-medical.com

Website • www.wirthwein-medical.com

Number of Employees • 330 Founded (year) • 1946

Areas of Activity · | Medical technology

| Diagnostics

| Pharma

Wirthwein Medical GmbH & Co. KG – We bring plastics to life

Founded by Horst Riegler in 1946, Wirthwein Medical GmbH & Co. KG is today a high-performance system supplier for plastics processing and a development partner for plastic-based product solutions. Focusing on quality and innovation, Wirthwein Medical has also made its mark internationally in the diagnostics, medical technology, and pharmaceutical industries - with highprecision, customised components, packaging, and systems. Our core competences include development, design, mould making, injection moulding and extrusion blow moulding, and a wide range of assembly, finishing, and logistics services. Most of our production is carried out in class 7 clean rooms pursuant to ISO 14644-1. Highest, standardised quality and hygiene standards are assured using gapless, certified quality management according to ISO 13485, 9001, 15378, and ISO 50001.

Presently, more than 300 employees work at three sites in Mühltal and Ober-Ramstadt – on a total area of around 55,000 square meters.

Wirthwein Medical GmbH & Co. KG has been a subsidiary company of the internationally active, family-managed Wirthwein Group since 2005.

Highest article purity thanks to certified ISO 7 clean room production

As an experienced expert in clean room production, we manufacture customer-specific system solutions and components under standardised and controlled conditions. Based on our hygiene guidelines according to DIN EN ISO 14644-1 (Class 7), process monitoring, and our Riegler Minimum Human Contact philosophy we guarantee clean and dust-free production of your products. Our reliability is appreciated by our customers from pharmaceuticals, diagnostics, and also medical technology, particularly in the application field of PCR and in ATP hygiene monitoring.

WIRTHWEIN MEDICAL



All in One by Wirthwein Medical

As a system supplier of highly complex plastic components, assemblies, and packaging material we meet the specific demands of the medical technology, diagnostics, and pharmaceutical industries.

Product examples

Medical technology

- Micro moulded parts made of thermoplastic materials
- Tubes and flanges for hemodialysis
- Systems for ophthalmological applications

Diagnostics

- Diagnostics systems for automated blood analysis
- PCR diagnostics (e.g. tubes & stripes)
- Laboratory diagnostics (e.g. petri dishes)
- Systems for DNA analysis & DNA duplication

Pharmaceutical industry

- Rapid test devices (e. g. for ATP measurements)
- Dosing and closure systems
- Plastic bottles for drugs and sensitive active ingredients
- Primary packaging for maximum patient safety

Customised packaging solutions made of plastics

We provide you with high-quality and economic primary and secondary packaging for a variety of applications in the diagnostics, medical technology, cosmetics, pharmaceutical, and food industries:

- Closures and covers
- **Bottles**
- Containers and cans
- Application systems and mixing systems





Name · ZECHA Hartmetall-Werzeugfabrikation GmbH

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Social Media · 🖒 🛩 in 🖸





Number of Employees · Ca. 130

Founded (year) · 1964

Areas of Activity • | Medical and dental technology

| Chronograph industry | Automotive industry | Tool and mould making

External • | AlienTools GmbH

Collaborations | MPK Special Tools GmbH

I ZECHA PRECISION TOOLS LIMITED

ZECHA Hartmetall-Werkzeugfabrikation GmbH has been a pioneer and trendsetter in the field of micro cutting, blanking, and forming tools for over half a century. The company can trace its origins back to the chronograph industry - which probably explains our uncompromising commitment to manufacturing not only miniature tools of the highest precision but also customised tool solutions. Precision and quality are key features for international application in different industries, such as in medical and dental technology. Experts in our technology department are constantly developing groundbreaking geometries and tools for sophisticated applications and cutting-edge materials.

Optimum geometries for Torx®* interfaces

Machining of titanium, stainless steel, and special materials in medical technology requires individual solutions at the highest level. For example, the TORX®* interface in medical technology is a proven and frictional connection between bone screw and screwdriver. For milling the TORX®* contour in titanium and stainless steel screws, ZECHA designed special micromilling cutters that offer maximum precision, surface quality, and sustainable profitability.

Precise tools for implants

In addition to patented series 462 of solid carbide whirl thread cutters for cylindrical and precisely contoured internal threads, such as those needed for implant posts and medical devices. ZECHA also offers reliable diamond-coated milling cutters for machining zirconium oxide, as well as special WAD-coated milling cutters for cobalt-chromium, plastics, and wax for manufacturing dental replacements.

Reliable tools for the dental industry

There is a constantly increasing demand for precision and process reliability in the manufacture of dentures. Materials that are especially difficult to machine call for high-quality milling tools to produce the small, intricate

Member of





KINGFISHER



ZECHA HARTMETALL-WERKZEUGFABRIKATION

geometries of inlays and onlays, bridges, and crowns. For these applications, ZECHA produces reliable diamond-coated mill cutters for the machining of zirconium oxide, cobalt-chromium, plastics, and wax.

Competence in the manufacture of bone plates

Exacting applications in titanium, stainless steel, and special materials, such as for the complex production of bone plates, are mastered by using ZECHA's high quality, optimally coordinated tool solutions.

Steadfast with cool precision

The KINGFISHER line has been especially been developed for the machining of difficult-to-process materials in the medical technology sector and features the interplay of new solid carbide substrate, two innovative cooling solutions, and a more stable basic geometry. Paired with the latest WAD coating technology, these tools master any challenge in a steadfast and precise fashion.

Challenge of PEEK machining

Zecha makes use of its innovative IGUANA tool line to approach difficult-to-machine materials in the medical technology sector. These small-bore-sector multi-cutters with laser-sharpened cutting edges and a highly wear-resistant, sealed diamond coating effortlessly process highly abrasive materials such as non-ferrous metals, copper, or even PEEK. The processed lasersharpened cutting edges lead to improved surface quality and an increased tool life. IGUANA tools are available in different application-specific designs and combinations: with edge protection, double-sided sharp cutting edge, spiralisation, or shank cooling system.



Name · Zeltwanger Group

Website · www.zeltwanger.com

Social Media · in 🕞 🖸

Number of Employees • >450 Founded (year) • 1982

Subsidiaries:

Name • Zeltwanger Dichtheits- und

Funktionsprüfung GmbH
Address/P.O. Box • Maltschachstraße 32

Postal Code/City · 72144 Dußlingen

State · Baden-Wuerttemberg

Contact Person · Mr Dominic Hofer
Telephone · +49-7072-92897528
Mobile · +49-171-9314971

Email · D.Hofer@zeltwanger.de

Areas of Activity · Leak testing with air or tracer gases

Name • Zeltwanger Laser Robotic

Applications GmbH & Co. KG

Address/P.O. Box · Maltschachstraße 32
Postal Code/City · 72144 Dußlingen

State • Baden-Wuerttemberg

Contact Person · Mr Gia Hung Ha

Telephone • +49-7072-92897732 Mobile • +49-170-4870964

Email • G.Ha@zeltwanger.de

Areas of Activity · Automation solutions for

medical industry, e-mobility,

automotive etc.

About the company

All the companies in the ZELTWANGER Group have one thing in common: We stand for competency, innovation, and technical solutions at the highest level. We devote ourselves to this demand every day and everywhere in the world. Our customers benefit from the combined engineering, material, and production competencies of the whole ZELTWANGER Group. Our goal is to be the perfect partner for your processes, always offering ideal solutions.

ZELTWANGER Laser Robotic Applications

Whether welding, cutting, or marking – laser technology is essential for numerous production processes in medical technology. When automated, it brings many economic advantages, such as higher production capacity or process flexibility. A combination with a robot represents an optimal design for various applications.

X-I OAD cobot

For automated loading of existing working stations or laser marking machines we offer a compact and simple platform – the X-LOAD cobot. With the help of ou X-LOAD cobot you achieve continuous production 24/7 without large-scale investment.

X-CELL MED

If you prefer a one-box-solution, we can offer our X-CELL, which includes laser, feeding system, and handling within one cell. It represents a modular concept that can be supplemented according to your requirements.

X-WELD

If you require a compact welding laser, the X-WELD is the perfect device for you. It has a space-saving layout, yet is still able to process large components. Moreover, the working space is ergonomically designed and can be adjusted in height.

As an automation specialist we support our customers from analysis, customer specific solutions, assembly, and software development up to launch and service.

Member of



ZELTWANGER



ZEDmod with ZEDcore



ZED Family





ZELTWANGER Leak Testing

Quality control is a key factor in production, especially in medical technology. Leak testing plays a vital role in this sector. As an expert in leak testing with air or tracer gases such as helium or forming gas, ZELTWANGER combines extensive knowledge and innovation. Impeccable performance meets unprecedented flexibility united in our modular architecture - representing a milestone in leak testing.

ZEDcore

The heart of our leak testing devices is the measuring module ZEDcore. It contains the measuring circuit – with choices of different methods such as relative pressure, differential pressure, mass flow, or others. Integratable into each ZELTWANGER device, it offers the utmost precision throughout the whole product family.

The ZELTWANGER family

Various demands require different solutions. Devices for one or two measuring circuits, devices for up to eight measuring circuits, or semi-/fully-automated leak test stations - the product family contains the perfect solution for every need, controllable via touch screen, different digi-I/-O solutions, or an external PLC.

Thanks to our extensive experience, our comprehensive knowledge, and our diverse product family, ZELT-WANGER is your excellent partner in leak testing.

German Medtech Companies

The register contains cluster members and associated companies of:

BVMed: German Medical Technology Association

FMP: Network Forum MedTech Pharma

IVAM: Microtechnology Network LSN: Life Science Nord Cluster мм-Cluster Medical Mountains

MTSW: MicroTec Südwest

MV: Medical Valley European Metropolitan Region

of Nuremberg

SPECTARIS: German Hightech Industry Association

VDMA: The Mechanical Engineering Industry

Association

1A CUE Consulting & Engineering GmbH, Schöngeising (FMP, MV)

1stQ Deutschland GmbH, Mannheim (BVMED)

2be_die Markenmacher GmbH, Nürnberg (MV)

2E mechatronic GmbH & Co. KG, Kirchheim unter Teck (MM)

2k Produktentwicklung Koentopp + Kargl GbR, München (FMP)

2W Technische Informations GmbH & Co. KG, München (VDMA)

3B Scientific GmbH, Hamburg (LSN)

3C-Carbon Composite Company GmbH, Landsberg am Lech (FMP)

3D Experts, Gutach (MM)

3D-LABS GmbH, St. Georgen (MM)

3D-Shape GmbH c/o ISRA Vision, Darmstadt (FMP)

3M Deutschland GmbH Health Care Business, Neuss (BVMED)

3T GmbH & Co. KG, Tuttlingen (MTSWW)

4CARE AG, Kiel (LSN)

4voice AG. Haar (FMP)

5medGmbH, Bad Abbach (FMP)

Α

A. Hopf Kunststoffverarbeitung GmbH, Cadolzburg (FMP)

A.K. TEK GmbH, Hagen

A.R.C. Laser GmbH, Nürnberg (FMP, MV)

A.S.T. - Mess- & Regeltechnik GmbH, Dresden (FMP)

A7-24 Aumann Gmbh, Bamberg (MV)

aap Implantate AG, Berlin (BVMED)

AB-CT - Advanced Breast-CT GmbH, Erlangen (MV)

ABB AG, Ladenburg (MTSW)

Abbott GmbH & Co. KG, Wiesbaden (BVMED, SPECTARIS)

Abbott Medical GmbH, Wetzlar (BVMED)

Abena GmbH, Zörbig (BVMED)

ABF-Pharmazie, Apothekerin Eva Schreier e. K., Fürth (MV)

Abiomed Europe GmbH, Aachen (BVMED)

acad group GmbH, Heilsbronn (FMP, MV)

Acandis GmbH, Pforzheim (BVMED)

ACCETIS International Germany GmbH, München (MV)

ACD Elektronik GmbH, Achstetten (FMP) ACE Stoßdämpfer GmbH, Langenfeld (VDMA)

Acentiss GmbH, Leinfelden-Echterdingen (MM)

Ackermann Instrumente GmbH, Rietheim-Weilheim (MM)

ACMIT GmbH, Wiener Neustadt (FMP) acp systems AG, Ditzingen (MTSW, MM)

Acquandas GmbH, Kiel (LSN)

ACSYS Lasertechnik GmbH, Kornwestheim (VDMA)

Active Key GmbH & Co. KG, Pegnitz (MV)

Activoris Medizintechnik GmbH, Gemünden (FMP, MV)

Activus GmbH, Hamburg (LSN) ACTO GmbH. Braunschweig (FMP)

Actuator Solutions GmbH, Gunzenhausen (FMP) ADAPT Localization Services GmbH, Bonn (FMP) add'n solutions GmbH & Co. KG, Tuttlingen (MM)

ADE GmbH & Co., Hamburg (LSN) Admedes GmbH. Pforzheim (MTSW)

ADT Angst Drehteile GmbH & Co. KG, Frittlingen (MM)

Advalange, Moskau (FMP)

Advanced Medical Solutions, Winsford (FMP)

ADVANOVA GmbH, Erlangen (MV) ADVITOS GmbH, München (FMP)

AE Adam GmbH, Felde (LSN) AEMtec GmbH, Berlin (FMP, IVAM, MM)

ärzte.de MediService GmbH & Co. KG, Nürnberg (MV)

Aesculap AG, Tuttlingen (BVMED, MM)

AESCULAP AKADEMIE GmbH, Tuttlingen (SPECTARIS)

aescuvest GmbH, Frankfurt am Main (FMP, MV)

AFRA GmbH, Erlangen (MV)

AFS Medizintechnik GmbH, Hamburg (LSN)

Ageneo Life Science Experts GmbH, München (FMP)

AGH Diagnostics GmbH, Hamburg (LSN)

AGRODUR Grosalski GmbH & Co. KG, Bad Berleburg (MM)

Al4BD Deutschland GmbH, Furtwangen (MM)

Aicher Präzisionstechnik GmbH & Co. KG. Königsheim (MM)

air-be-c Medizintechnik GmbH, Gera (SPECTARIS)

AIT Austrian Institute of Technology GmbH, Vienna, Austria (FMP)

Akademie für Internationale Ausbildung und Weiterbildung, Engen (FMP)

AKP GmbH, Freiburg (MM)

Akrus GmbH & Co. KG. Elmshorn (LSN)

aktivmed GmbH, Rheine (BVMED)

AKTORmed GmbH, Barbing (FMP)

Albert-Ludwigs-Universität Freiburg – IMTEK, Freiburg (MTSW)

Albomed GmbH, Schwarzenbruck (MV)

Albrecht Präzision GmbH & Co. KG, Wernau (VDMA)

ALCON Deutschland GmbH, Freiburg (BVMED)

Alcon® Pharma GmbH, Großostheim (SPECTARIS)

alfa-Horizont GmbH & Co. KG, Zimmern ob Rottweil (MM)

Alfred H. Schütte GmbH & Co. KG, Köln (VDMA)

ALL4NET GmbH, Villingen-Schwenningen (MM)

Allergan GmbH, Frankfurt am Main (BVMED)

Allgaier Instrumente GmbH, Frittlingen (MM)

Allied Vision Technologies GmbH, Stadtroda (VDMA)

ALLISTRO GmbH, Frankfurt am Main (MV)

alloPlus GmbH, Saarbrücken (BVMED)

ALLTEC GmbH, Selmsdorf (MM)

Alna-Medicalsystem GmbH, Hamburg (LSN)

ALPO Technik Medical Products GmbH & Co. KG, Auerbach (FMP, MV)

ALS Automated Lab Solutions GmbH, Jena (SPECTARIS)

ALTEN Technology GmbH, Lübeck (LSN)

Altran Deutschland S.A.S. & Co. KG, München (FMP)

ALU REHAB ApS, Ry (SPECTARIS)

AMIPLANT GmbH, Schnaittach (MV)

AMNOTEC International Medical GmbH, Neuhausen o.E. (MM)

Amplifon Deutschland GmbH, Hamburg (LSN)

AMPLITUDE GmbH, Nieder-Olm (BVMED)

AMPri Handelsgesellschaft mbH, Winsen (LSN)

Amptec GmbH, Hamburg (FMP)

ams Sensors Germany GmbH, Nürnberg (IVAM)

AMSilk GmbH, Planegg/Martinsried (FMP)

Anderson Europe GmbH, Detmold (VDMA)

Andreas Fahl Medizintechnik-Vertrieb GmbH, Köln (BVMED)

Andreas Hettich GmbH & Co.KG, Tuttlingen (SPECTARIS)

ANDREAS MAIER GmbH & Co. KG. Fellbach (VDMA)

Andritz Diatec S.r.I, I-Collecorvina, Pescara (Italy) (VDMA)

Angewandte System Technik GmbH, Wolnzach (FMP)

Ansell GmbH, München (BVMED)

anteris medical GmbH, Holzkirchen (FMP)

ANTRIMON Deutschland GmbH, Aldingen (MM)

AnyTec Hygienesysteme, Apolda (FMP)

AOK Bayern - Die Gesundheitskasse, München (FMP)

AOK Bayern - Die Gesundheitskasse, Nürnberg (FMP)

AP&S International GmbH, Donaueschingen (MTSW, MM)

Apium Additive Technologies GmbH, Karlsruhe (MM)

Apotheke Schug, Eschenbach (MV)

APP TOX Consulting, Hamburg (LSN)

AQ Implants GmbH, Ahrensburg (LSN)

Aqua free GmbH, Hamburg (LSN)

Arbeitskreis Medizintechnik Hamburg e.V., Hamburg (LSN)

ARBURG GmbH + Co KG, Loßburg (VDMA)

arelion AG, Schwabach (MV)

Aristotech Industries GmbH, Luckenwalde

Arjo Deutschland GmbH, Mainz-Kastel (BVMED)

Arnd Sauter GmbH, Hornberg (MM)

ArtFlex Software GmbH, Nordhalben (MV)

ARTIMED® Medical Consulting GmbH, Kassel (MM)

Artus Communications Ltd., Halle (FMP)

AS Medizintechnik GmbH, Tuttlingen (MM)

ASANUS Medizintechnik GmbH, Neuhausen (MM, SPECTARIS)

Asbach Medical Products GmbH, Obrigheim (FMP)

ascendi MEDIZINTECHNIK, Nürnberg (FMP, MV)

ASCO Numatics GmbH, Ölbronn-Dürrn (VDMA)

Asklepios Kliniken Hamburg GmbH, Hamburg (LSN)

ASPROVA AG, Wetzlar (VDMA)

ASQF e.V., Potsdam (MV)

ASSAmed GmbH, Bexbach (BVMED)

Assmann GmbH, Kiel (LSN)

Assmann Medical, Wenningstedt-Braderup/Sylt (LSN)

AstraCon GmbH, Tübingen (FMP)

ASTRUM IT GmbH, Erlangen (FMP, MM, MV)

asvin GmbH, Stuttgart (MTSW)

Asys-Tecton GmbH, Mönchweiler (MM)

AT-Design, Fürth (FMP, MV)

ATMOS MedizinTechnik GmbH & Co. KG, Lenzkirch (BVMED, SPECTARIS)

ATR Software GmbH, Neu-Ulm (MTSW)

Attends GmbH, Schwalbach am Taunus (BVMED)

AUC - Akademie der Unfallchirurgie GmbH, München (FMP)

Audio-Ton Medizinisch-Technische Systeme GmbH, Hamburg (LSN)

August Reuchlen GmbH, Tuttlingen (MM)

Augustine Medical GmbH, Arizant Deutschland GmbH, Trittau (LSN)

AUREPS UG, Gaienhofen (MM)

auric Hörsysteme GmbH & Co. KG, Rheine (BVMED)

AURITEC Medizindiagnostische Systeme GmbH, Hamburg (LSN)

AusSI Systems Pty. Ltd., NSW Marrickville, Sydney, Australia (MV)

Automation W+R GmbH, München (VDMA)

Autronic Reglersysteme GmbH, Hamburg (LSN)

Avanti GmbH, Hamburg (FMP)

avasis GmbH, Radolfzell (MM)

aXcent medical GmbH, Koblenz (SPECTARIS)

axiom insights GmbH, Hamburg (LSN)

AxynTeC Dünnschichttechnik GmbH, Augsburg (FMP, IVAM)

aycan Digitalsysteme GmbH, Würzburg (MV)

В

B-K Medical Medizinische Systeme GmbH, Quickborn (LSN)

B Medical Systems, Hosingen, Luxembourg

B. Braun Avitum Saxonia GmbH, Radeberg (SPECTARIS)

B. Braun Melsungen AG, Melsungen (BVMED)

B. Braun Miethke GmbH & Co. KG in Potsdam, Potsdam (SPECTARIS)

B. Ketterer Söhne GmbH & Co. KG., Furtwangen (MM)

Babtec Informationssysteme GmbH, Villingen-Schwenningen (MM)

bachorskidesign, Lübeck (LSN)

Baden-Württemberg International, Stuttgart (MTSW)

BadenCampus GmbH & Co. KG, Breisach (MTSW)

BAG Diagnostics GmbH, Lich (FMP)

BaHe Verpackungen OHG (Georg Schrepfer GmbH), Nürnberg (MV)

Balluff GmbH, Neuhausen (MTSW, VDMA)

BAM GmbH, Weiden (MV)

Bartels Mikrotechnik GmbH, Dortmund (IVAM)

Basko Orthopädie Handelsgesellschaft mbH, Hamburg (LSN)

Basler AG, Ahrensburg (VDMA)

BATT mbH, Erfurt (IVAM)

Bauer & Häselbarth - Chirurg GmbH, Ellerau (LSN, SPECTARIS)

Baumüller Nürnberg GmbH, Nürnberg (VDMA)

Bausch & Lomb GmbH, Berlin (BVMED)

Bavaria Digital Technik GmbH, Pfronten (FMP)

Bavaria Medizin Technologie GmbH, Oberpfaffenhofen (FMP)

Baxter Deutschland GmbH, Unterschleißheim (BVMED)

bayer Feinwerk GmbH & Co.KG, Villingen-Schwenningen (MM)

Bayerische Patentallianz GmbH, München (FMP)

Bayerisches Laserzentrum GmbH, Erlangen (MV)

Bayern Innovativ - Bayerische Gesellschaft für Innovation und Wissens-

transfer mbH, Nürnberg (FMP)

BAYOOMED Medical Software, Darmstadt (FMP) bayoonet AG, Darmstadt (FMP, MM, MV)

BayStartUp GmbH, Nürnberg (MV)

BAZARGANI | Design+Innovation, Hamburg (LSN)

BBC Cellpack Technology, Villmergen (MM)

BBF Sterilisationsservice GmbH, Kernen-Rommelshausen (MM)

bc-technology GmbH, Frickenhausen (MM)

BD Becton Dickinson GmbH, Heidelberg (BVMED)

BDT-MVZ Radiologie & Nuklearmedizin, Erlangen (MV)

be-on-Quality GmbH, Reichenschwand (FMP)

Beaver-Visitec International (BVI), Heidelberg (BVMED)

BEE Medic GmbH, Singen (FMP)

Beenen IT-Lösungen GmbH, Deutsch Evern (LSN)

BEETZ & PARTNER mbB Patent- und Rechtsanwälte, München (FMP)

Beiersdorf AG, Hamburg (BVMED)

Belimed GmbH, Mühldorf (SPECTARIS)

BEMA GmbH + Co. KG, Emmingen-Liptingen (MM)

Benkana Interfaces GmbH & Co. KG, Kiel (LSN)

BERGER Industries e.K., Troisdorf (IVAM)

Berghaus Translations, Speyer (FMP) Berlin Heart GmbH, Berlin (BVMED)

Berliner Glas KGaA, Berlin (IVAM, SEPCTARIS)

Bernhard Schulz & Sohn Ärzte- und Krankenhausbedarf, Hamburg (LSN)

Bernstein AG. Porta Westfalica (VDMA)

Bertrandt Services GmbH, Ehningen (FMP)

Berufliche Bildungsstätte Tuttlingen GmbH, Tuttlingen (MM)

Berufsgenossenschaftliche Unfallklinik Murnau, Murnau (FMP)

Berufsgenossenschaftliches Universitätsklinikum Bergmannsheil

GmbH, Bochum (FMP)

best medical GmbH, Neuhausen ob Eck (MM)

BETZ Dentalgeräte GmbH, Kiel (LSN)

Bezirkskliniken Mittelfranken, Ansbach (MV) BG Klinikum Murnau qGmbH, Murnau (FMP)

BGS Beta-Gamma-Service GmbH & Co. KG, Wiehl (BVMED, MM)

bielomatik GmbH, Neuffen (MM)

bien plus team GmbH, Spaichingen (MM)

BILZ Werkzeugfabrik GmbH & Co. KG, Ostfildern (VDMA)

Binder Elektronik GmbH, Höpfingen-Waldstetten (MTSW)

binder Innovations- & Technologie Zentrum (ITZ), Bad Rappenau (MTSW)

Bio-Gate AG, Nürnberg (FMP, MV)

BioCer Entwicklungs-GmbH, Bayreuth (FMP)

BioFluidix GmbH, Freiburg (MTSW)

BioKat Systeme GmbH, Lahr (MM)

biolitec biomedical technology GmbH, Jena (BVMED)

Bio^M Biotech Cluster Development GmbH, Martinsried (FMP)

Biomagnetik Park GmbH, Hamburg (LSN)

BioMed Center Innovation gGmbH, Bayreuth (FMP, MV)

BioMedical Services, Strullendorf (FMP)

BioPark Regensburg GmbH, Regensburg (FMP)

BIOPRO Baden-Württemberg GmbH, Stuttgart (MTSW)

BiOPT Bettina Illig, Hannover (FMP)

BioTeSys GmbH, Esslingen (FMP)

BIOTRONIK SE & Co. KG, Berlin (BVMED)

BioVariance GmbH, Waldsassen (FMP, MV)

BizIOs GmbH, Neuhausen ob Eck (MTSW)

Blaser Swisslube GmbH, Stuttgart (MM, VDMA)

Bloom Health GmbH, Berlin (FMP)

Bloss-Systems GmbH, Wendelstein (MV)

Bluetest Testservice GmbH, Leonberg (MTSW)

Bluewater Medical GmbH, Kiel (LSN)

Blutspendedienst des Bayerischen Roten Kreuzes gGmbH, München (FMP)

BMC-PRIMA GmbH, Uhingen (MM)

BmedS Beste medizinische Spezialitäten GmbH, Timmendorfer Strand (LSN)

BMP Competence GmbH, Alsdorf (FMP)

Bobbert & Partner Patentanwälte PartmbB, Erding (FMP)

Boehringer Ingelheim microParts GmbH, Dortmund (IVAM)

BOGE KOMPRESSOREN Otto Boge GmbH & Co. KG, Bielefeld (VDMA)

Bon Optic Vertriebsgesellschaft mbH, Lübeck (LSN, SPECTARIS)

BONESUPPORT GmbH, Frankfurt (BVMED)

Bosch + Sohn GmbH u. Co. KG, Jungingen (SPECTARIS)

BOSCH JEHLE Patentanwaltsgesellschaft mbH, München (FMP)

Bosch Sensortec GmbH, Reutlingen (MTSW)

Boston Scientific Medizintechnik GmbH, Ratingen (BVMED)

BoxQM, Geisingen-Gutmadingen (MM)

Bracco Imaging Deutschland GmbH, Konstanz (BVMED)

Brainlab AG, Feldkirchen (BVMED)

Brainport Industries, AZ Eindhoven (FMP)

Breas Medical GmbH, Herrsching (SPECTARIS)

BRIEM Steuerungstechnik GmbH, Nürtingen (MM)

Brigitte Mack MT Consulting und Dokumentation, Maintal (FMP)

Bristol-Myers Squibb GmbH & Co. KGaA, München (FMP)

Brückner Group GmbH, Siegsdorf (VDMA)

Bruker Nano GmbH, Berlin (IVAM)

BSL BIOSERVICE Scientific Laboratories Munich GmbH, Planegg (FMP)

BSN medical GmbH, Hamburg (BVMED, LSN)

Bürkert GmbH & Co. KG, Ingelfingen (VDMA)

Büro für Biomechanik, Kreuzlingen (FMP)

BuildLine GmbH, Villingen-Schwenningen (MM)

Burmeier GmbH & Co. KG, Lage (SPECTARIS)

Business Innovation Engineering Center (BIEC), Stuttgart (MM)

Business Upper Austria – OÖ Wirtschaftsagentur GmbH, LINZ, AT (MV)

bwcon e.V., Stuttgart (MTSW)

Bytec Medizintechnik GmbH, Eschweiler (FMP, VDMA)

С

C-tec Cleanroom-Technology GmbH, Rottenburg (MM)

C. Bruno Bayha GmbH, Tuttlingen (MM)

C. HAFNER GmbH & Co. KG, Wimsheim (MM)

C. Otto Gehrckens GmbH & Co. KG, Pinneberg (VDMA)

C. R. Bard GmbH, Karlsruhe (BVMED)

CabTec AG, Rotkreuz (Schweiz) (VDMA)

CADFEM GmbH, Grafing (FMP, VDMA)

Cadida Software GmbH, Freiburg (MM)

CADiLAC Laser GmbH, Hilpoltstein (FMP)

Camfil KG, Reinfeld (VDMA)

camLine Dresden GmbH, Dresden (IVAM)

CAMOLEON knowledge brokerage, Hamburg (FMP)

Camozzi Automation GmbH, Albershausen (VDMA)

CAMPTON Diagnostics GmbH, Itzehoe (IVAM)

CANDOR Bioscience GmbH, Wangen (FMP)

CANKADO Service GmbH, Kirchheim b. M. (BVMED)

CANZLER & BERGMEIER Patentanwälte - Partnerschaft mbB,

Ingolstadt (FMP)

Capnomed GmbH, Zimmern o.R. (MM)

Carbopress Deutschland GmbH, Eschborn (MM)

Cardinal Health Germany 507 GmbH, Norderstedt (BVMED)

Cardiobridge GmbH, Hechingen (BVMED)

CardioFocus Inc., Bad Tölz (BVMED)

Cardionovum GmbH, Bonn (BVMED)

Cardioscan GmbH, Hamburg (LSN)

Carl Benzinger GmbH, Pforzheim (VDMA)

Carl Haas GmbH, Schramberg (MTSW, MM)

Carl Martin GmbH, Solingen (SPECTARIS)

Carl Zeiss 3D Automation GmbH, Aalen (MTSW)

Can Zeiss 3D Automation GmbH, Aaien (WT)

Carl Zeiss Meditec AG, Jena (SPECTARIS)

Carl Zeiss Meditec Vertriebsgesellschaft mbH, Berlin (BVMED)

Carl Zeiss MES Solution GmbH, Ulm (VDMA)

Carlsquare GmbH, München (MV)

CAT PRODUCTION GmbH, München (FMP)

Catgut GmbH, Markneukirchen (BVMED)

CBDL Patentanwälte, Duisburg (FMP)

CDE Communications Data Engineering GmbH, Hagenberg (FMP, MV)

CDM Tech GmbH. Fellbach (MTSW)

CEA Deutschland GmbH, Hamburg (LSN)

CEATEC Medizintechnik GmbH, Wurmlingen (MM)

Cedalo AG, Kirchzarten (MTSW)

cedrei, Nürnberg (MV)

CEGLA Medizintechnik GmbH & Co. KG, Montabaur (BVMED)

CellmatiQ GmbH, Hamburg (LSN)

Centronic GmbH, Wartenberg (FMP)

CeramTec GmbH, Plochingen (BVMED)

CERES GmbH evaluation & research, Lörrach (FMP)

Cerner Health Services Deutschland GmbH, Berlin (FMP)

Cerus Europe B.V., Karlsruhe (BVMED)

Changzhou Institute of Materia Medica Co., Ltd., Reutlingen (MM)

Chemische Fabrik Kreussler & Co. GmbH, Wiesbaden (BVMED)

Chempatex Medizinische Vertriebsgesellschaft mbH, Wentorf (LSN)

Chimaera GmbH, Erlangen (MV)

CHIRON Werke GmbH & Co.KG, Tuttlingen (MM, VDMA)

Chirurgie Bad Schwartau, Bad Schwartau (LSN)

Chirurgische Klinik und Poliklinik Klinikum rechts der Isar TU München, München (FMP)

Chr. Diener GmbH & Co. KG, Tuttlingen (MM)

Chr. Mayr GmbH + Co. KG, Mauerstetten (VDMA)

Christian Dunkel GmbH Werkzeugbau, Berlin (VDMA)

Christian-Albrechts-Universität zu Kiel, Kiel (LSN)

Christoph Miethke GmbH & Co. KG, Potsdam (SPECTARIS)
Cicor Electronic Solutions Swisstronics Contract Manufacturing AG,

Bronschhofen (FMP)
Cicor RHe Microsystems GmbH, Radeberg (IVAM)

CiNNAMED GmbH, Erlangen (MV)

CINOGY GmbH, Duderstadt (BVMED)

CiS Forschungsinstitut für Mikrosensorik GmbH, Erfurt (IVAM)

Citizen Machinery Europe GmbH, Esslingen (VDMA)

CIVAL Medtech GmbH, Tuttlingen (MM)

clean4med Gmbh, Konstanz (MM)

CleanControlling Medical GmbH & Co. KG, Emmingen-Liptingen (MM)

Climedo Health GmbH, München (FMP)

Clinaris GmbH, Garching bei München (FMP)

CMC Medical AG, Wurmlingen (MM)

CMS Hasche Sigle Partnerschaft von Rechtsanwälten und Steuer-

beratern mbB, München (FMP)

Cochlear Deutschland GmbH & Co. KG, Hannover (BVMED)

CODAN Medizinische Geräte GmbH & Co. KG, Lensahn (LSN)

CODAN pvb Critical Care GmbH, Forstinning (FMP)
CoaniMed GmbH, Reinfeld (LSN)

cognitas. Gesellschaft für Technik-Dokumentation mbH, Ottobrunn (VDMA)

Coherent Kaiserslautern GmbH Kaiserslautern (IVAM)

Coherent Laser Systems GmbH & Co. KG, Lübeck (LSN)

Coherent Munich GmbH & Co. KG, Gilching (VDMA)

COI GmbH - Competence Center Pharma & Life Science, Erlangen (MV)

Colandis GmbH, Kahla (VDMA)

COLLIN Lab & Pilot Solutions GmbH, Maitenbeth (FMP)

Coloplast GmbH, Hamburg (BVMED, LSN)

Coltène/Whaledent GmbH + Co. KG, Langenau (BVMED)

Comcotec Messtechnik GmbH, Unterschleißheim (FMP)

Comelec SA, La Chaux-de-Fonds (MTSW)

competence4innovations, Gerbrunn (FMP)

Compugraphics Jena GmbH, Jena (IVAM)

Compumedics Germany GmbH, Singen (MM)

Comretix GmbH, Tuttlingen (MM) Concenter e.K., Hamburg (FMP)

Concept Laser GmbH, Lichtenfels (VDMA)

Condor GmbH, Salzkotten (SPECTARIS)

CONFIANZA GmbH, München (FMP)

confovis GmbH, Jena (IVAM)

Conntec GmbH, Baiersdorf (MV)

Conplement AG, Nürnberg (FMP)

Contact Software GmbH, Bremen (LSN)

CONTACT Software, Bremen (VDMA)

Continental Trebbin GmbH + Co. KG, Eichstätt (VDMA)

ConvaTec (Germany) GmbH, München (BVMED)

CONZE Informatik GmbH, Siegen (FMP)

COOK Deutschland GmbH, Mönchengladbach (BVMED)

COPT Zentrum Köln, Köln (IVAM)

Corin GSA GmbH, Saarbrücken (BVMED)

Corscience GmbH & Co. KG, Erlangen (MV)

CorTec GmbH, Freiburg (FMP, IVAM, MTSW)

Cosyst Control Systems GmbH, Nürnberg (MV)

Cowa-Service Felix Conrady Gebäudereinigungsgesellschaft

mbH & Co. KG. Gottmadingen (MM)

CRE Rösler Electronic GmbH, Hohenlockstedt (LSN)

Creative Instruments GmbH, Schörghof (FMP)

CSA Group, Frankfurt am Main (MM)

CTC advanced GmbH, Saarbrücken (VDMA)

curasan AG. Kleinostheim (BVMED)

curea medical GmbH, Berlingerode (BVMED)

Curefab Technologies GmbH, München (FMP)

Cyberdyne Care Robotics GmbH, Bochum (FMP)

Cytox Biologische Sicherheitsprüfungen, Bayreuth (FMP)

D

DanFlex GmbH, Hamburg (LSN)

DANNORITZER Medizintechnik GmbH & Co. KG, Tuttlingen (MM)

Das Trainingszentrum UG, Beratzhausen (FMP)

DataPhysics Instruments GmbH, Filderstadt (MTSW)

DaThera Consumer Health, München (FMP)

DATRON AG, Mühltal (VDMA)

DBK EMS GmbH & Co. KG, Rülzheim (MM)

DCI-Dental Consulting GmbH, Kiel (LSN)

DCT - Design & Culture Team, Stuttgart (MTSW)

ddm hopt+schuler GmbH & Co. KG, Rottweil (MM)

decema GmbH, Singen (MM)

DECKEL MAHO Pfronten GmbH, Pfronten (VDMA)

DECKEL MAHO Seebach GmbH, Seebach (VDMA)

Decomplix AG, Bern (MM)

DEF- Dr. F. Immeyer GmbH, Hamburg (LSN)

DEFINIENS GmbH, München (FMP)

DEHAS Medizintechnik & Projektierung GmbH, Lübeck (LSN)

DEKOM Engineering GmbH, Hamburg (LSN)

delbramed GmbH, Frittlingen (MM)

DELTA Verwaltungsgesellschaft mbH, Barbing (FMP)

Dental Kontor GmbH, Stockelsdorf (LSN)

Dentale Competence Germany KG, Bordesholm (LSN)

Dentavenir GmbH & Co. KG, Nürnberg (MV)

Denteon MedTec Business Consulting, Bad Windsheim (FMP)

DEBU GmbH Norderstedt (LSN)

designaffairs GmbH, Erlangen (FMP, MV)

Deutsche Institute für Textil- und Faserforschung Denkendorf (DITF),

Deutsche Stiftung für chronisch Kranke, Fürth (FMP)

Deutsches Elektronen Synchrotron (DESY), Hamburg (LSN)

Deutsches Institut für Ergonomie und Usability (INERUS),

Friedrichshafen (MM)

Deutsches Telemedizin Zentrum e.V., Nürnberg (MV)

Deutsches Zentrum für Luft- und Raumfahrt e.V. Robotik und

Mechatronik Zentrum, Oberpfaffenhofen-Weßling (FMP)

Devicor Medical GmbH, Norderstedt (LSN)

DeVilbiss Healthcare GmbH, Mannheim (SPECTARIS)

DEWE+CO Verbandstoff-Fabrik Dr. Wüsthoff GmbH & Co.,

Wermelskirchen (BVMFD)"

Diakoneo KdöR, Neuendettelsau (MV)

Diamed Medizintechnik GmbH, Köln (BVMED)

DiaMedCare GmbH, München (MV)

DIASHOP GmbH, Germering (BVMED)

DiBe Consulting, Erding (FMP)

Diener AG Precision Machining, Embrach, Switzerland

Diener Implants GmbH, Tuttlingen (MM)

digiraster GmbH & Co. KG, Stuttgart (MTSW)

Digital Chameleon GmbH, Basel (MM)

Dispomedica GmbH, Hamburg (LSN)

DITABIS Digital Biomedical Imaging Systems AG, Garching (FMP)

DITF - Deutsche Institute für Textil- und Faserforschung,

Denkendorf (MTSW, VDMA)

DITTEL Engineering GmbH, Schlehdorf (FMP)

DMB-Apparatebau GmbH, Wörrstadt (SPECTARIS)

DMG Chemisch Pharmazeutische Fabrik GmbH, Hamburg (LSN)

DMG Dental-Material Gesellschaft mbH, Hamburg (LSN)

DMG MORI AG. Bielefeld (VDMA)

DMG MORI Ultrasonic Lasertec GmbH, Stipshausen (VDMA)

DMT Produktentwicklung GmbH, Nufringen (MM)

Doceram GmbH, Dortmund (VDMA)

DOCERAM Medical Ceramics GmbH, Dortmund (SPECTARIS)

DOCUFY GmbH, Bamberg (VDMA)

Doppkon GmbH & Co. KG, Spaichingen (MM)

Dornier MedTech Laser GmbH, Weßling (SPECTARIS)

dp dreher partners gmbh & Co. KG, Tuttlingen (MM)

DQS Medizinprodukte GmbH, Frankfurt am Main (FMP, MM)

Dr. Ausbüttel & Co. GmbH, Dortmund (BVMED)

Dr. Beckmann Pharma GmbH, Hamburg (LSN)

Dr. Fritz Faulhaber GmbH & Co. KG, Schönaich (MM) Dr. Gassner & Partner mbB Patentanwälte, Erlangen (MV)

Dr. Heinrich Schneider Messtechnik GmbH, Bad Kreuznach (VDMA)

Dr. Hönle Medizintechnik GmbH. Gilching (FMP)

Dr. K. Hönle Medizintechnik GmbH, Gilching (SPECTARIS)

Dr. Mach GmbH + Co., Ebersberg (SPECTARIS)

Dr. Michael Schoppol, Bremen (MM)

Dr. Pfleger Arzneimittel GmbH, Bamberg (FMP)

Dr. R. Pfleger Chemische Fabrik GmbH, Hallstadt (FMP)

Dr. Wilfried Müller GmbH, Prittriching (FMP)

Dräger Medical AG & Co. KG, Lübeck (LSN)

Dräger Medical Deutschland GmbH, Lübeck (LSN)

Drägerwerk AG & Co. KGaA, Lübeck (LSN, SPECTARIS)

DREIGEIST GbR, Nürnberg (MV)

DRG-Control e. K., Forchheim (FMP, MV)

DS Holding, Stapelfeld (LSN)

DTZ Dialyse Trainings-Zentren GmbH, Nürnberg (FMP)

Duale Hochschule Baden-Württemberg, Villingen-Schwenningen (MM)

Duresco GmbH, Witterswil (MM)

e.Bavarian Health GmbH, Erlangen (MV)

eagleyard Photonics GmbH, Berlin (IVAM)

EARLIEBIRDIE, Kolbermoor (FMP)

Earlybird Health Management GmbH & Co. KG, Berlin (FMP)

ebm-papst Mulfingen GmbH & Co. KG. Mulfingen (VDMA)

ebm-papst St. Georgen GmbH & Co. KG, St. Georgen (MM, VDMA)

Ebnet Medical GmbH, Schwerin (IVAM)

EBO Kunze Industriedesign - Chandler Loop System Neuffen, Neuffen (MM)

EC Europ Coating GmbH, Hohenlockstedt (LSN)

ECAD GmbH Electronic Components and Devices, Obernzell (FMP)

ECE Training GmbH, Erlangen (MV)

Eckelmann AG, Wiesbaden (VDMA)

Eckert & Ziegler BEBIG GmbH, Berlin (BVMED)

Ecolab Deutschland GmbH, Monheim am Rhein (BVMED)

ECOS Technology GmbH, Oppenheim (VDMA)

EDAP TMS GmbH, Flensburg (LSN)

Edmonton Economic Developement Corporation, Edmonton (FMP)

Edwards Lifesciences Services GmbH, Unterschleißheim (BVMED, FMP)

Efficiency Systems, Überlingen (VDMA)

Efforma Concepts GmbH & Co. KG, Nürnberg (FMP)

EFOMED GmbH, Henstedt-Ulzburg (LSN)

EGT AG, Triberg im Schwarzwald (MM)

Ehrfeld Mikrotechnik GmbH, Wendelsheim (IVAM)

Eisele Pneumatics GmbH & Co. KG, Waiblingen (VDMA)

Eisenhuth GmbH & Co.KG, Osterode (VDMA)

EIT Emerging Implant Technologies GmbH, Wurmlingen (MM)

Ekso Bionics Europe GmbH, Hamburg (LSN)

Elco Industrie Automation GmbH, Oberstenfeld (MTSW)

Elekta GmbH, Hamburg (LSN)

elektron Systeme und Komponenten GmbH & Co. KG, Weißenohe (MV)

Element 22 GmbH, Kiel (LSN)

elero GmbH Linearantriebstechnik, Pößneck (VDMA)

Elma Schmidbauer GmbH, Singen (MM)

ELMOS Semiconductor SE, Dortmund (IVAM)

elobau GmbH & Co. KG, Leutkirch (VDMA)

ElringKlinger Kunststofftechnik GmbH, Bietigheim-Bissingen (BVMED)

Elschner Consulting, Weil am Rhein (FMP)

ELTRO GmbH. Baesweiler (VDMA)

Eltroplan Industrial GmbH, Stockach (MM)

em-tec GmbH, Finning (FMP)

embemed Bleckmann Medicalprodukte GmbH, Hamburg (LSN)

embeX GmbH, Freiburg (MTSW, MM)

emka MEDICAL GmbH, Aschaffenburg (FMP)

EMPA - Swiss Federal Laboratories for Materials Science and

Technology, St. Gallen (FMP)

Empa Materials Science and Technology, Dübendorf (FMP)

EN Electronic Network Hamburg GmbH, Hamburg (LSN)

EN MediPart, Flensburg (LSN)

en.co.tec Schmid KG, Wien (FMP)

Endoaccess GmbH, Garbsen (FMP)

ENDOCOR GmbH, Glückstadt (LSN)

EndoMobil GmbH, Großenaspe (LSN)

Endosmart® Gesellschaft für Medizintechnik mbH, Stutensee (MM)

Endress+Hauser Services AG, Reinach BL1 (MTSW)

ENGEL AUSTRIA GmbH, Schwertberg (Austria) (VDMA)

ENGEL Deutschland GmbH, Wurmberg (MM)

ENGESSER GmbH, Geisingen (MM)

ENTRANCE Robotics GmbH, Wuppertal (IVAM)

EnviroFALK GmbH, Westerburg (VDMA)

EOSWISS Engineering Sàrl, Genève (MM)

EP Electronic Print GmbH, München (VDMA)

EPflex Feinwerktechnik GmbH, Dettingen (MM)

Epista Life Science Deutschland GmbH, Villingen-Schwenningen (MM)

Eppendorf AG, Hamburg (LSN, SPECTARIS)

Eppendorf Instrumente GmbH, Hamburg (LSN)

Eppendorf Polymere GmbH, Hamburg (LSN)

ePrax GmbH, München (FMP)

Erbe Elektromedizin GmbH, Tübingen (MM)

Erdmann Design AG, Brugg (MM)

Ergo-Tec GmbH, Wilhelmsdorf (MV)

ergoMotix GmbH & Co. KG, Hamburg (LSN)

Ergosurg GmbH, Ismaning (VDMA)

Erka Kallmeyer, Bad Tölz (SPECTARIS)

FRMIS MedTech GmbH Tuttlingen (MM)

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, München (FMP)

Ernst Krauskopf - Fabrik für chirurgische und zahnärztliche Instrumente, Solingen (SPECTARIS)

Erwin Kowsky GmbH & Co. KG, Neumünster (LSN)

Eschenbach Optik GmbH, Nürnberg (SPECTARIS)

Eschweiler GmbH & Co. KG, Kiel (LSN)

EsCo Orthopädie-Service GmbH, Remscheid (SPECTARIS)

eSourceONE GmbH, Bamberg (MV)

ess Mikromechanik GmbH, Stockach (MTSW, MM)

Essilor GmbH, Braunschweig (SPECTARIS)

Essity BSN medical GmbH, Hamburg (LSN)

Essity Germany GmbH, Mannheim (BVMED)

ETA Kunststofftechnologie GmbH, Troisdorf (VDMA)

ETO MAGNETIC GmbH, Stockach (VDMA)

eucatech AG, Weil am Rhein (FMP)

Eurofins BioPharma Product Testing Munich GmbH, Planegg (FMP)

Euromed Implants GmbH, Stade (LSN)

Eurotape B.V., Soest (BVMED)

evita.med GmbH, Gummersbach (BVMED)

Evosys Laser GmbH, Erlangen (FMP, MV)

EWELLIX GmbH, Schweinfurt (VDMA)

ewimed GmbH, Hechingen-Boll (BVMED)

Exactech Deutschland GmbH, Kiel (LSN)

Excelya Germany GmbH, Freiburg (MM)

EXCO GmbH, Frankenthal (FMP)

Exergene Technologie GmbH, Hamburg (LSN)

exeron GmbH, Oberndorf (MM)

Exevia GmbH, Nürnberg (FMP, MV)

expert Systemtechnik GmbH, Bielefeld (VDMA)

Extheria GmbH, Freiburg (MTSW)

Eyetec GmbH, Lübeck (LSN)

F. & M. Lautenschläger GmbH & Co. KG, Köln (SPECTARIS)

F. Reyher Nchfg. GmbH & Co. KG, Hamburg (VDMA)

F&F Lasertechnik GmbH, Neustadt (LSN)

F&W Frey & Winkler GmbH, Königsbach-Stein (MM)

Fachakademie für Medizintechnik, Ansbach (FMP)

Fachhochschule Aachen, Jülich (IVAM)

Fachhochschule Westküste, Heide (LSN) FairImplant GmbH, Bönningstedt (LSN)

Falk Medizinische Datenverarbeitung, Lübeck (LSN)

Falken Apotheke, Erlangen (MV)

FANUC Deutschland GmbH, Neuhausen (VDMA)

FAQ Consulting GmbH, Langenfeld (FMP)

Farmavita Regulanet d.o.o, Samobor (FMP)

FAUDE Automatisierungstechnik GmbH, Ehningen (VDMA)

FAULHABER Drive Systems, Schönaich (MM, VDMA)

FCMD GmbH, Hattingen (VDMA) FEG Textiltechnik Forschungs- und Entwicklungsgesellschaft mbH,

Aachen (BVMED)

Feinmetall GmbH, Herrenberg (MTSW)

Ferdinand Menrad GmbH +Co. KG, Schwäbisch Gmünd (SPECTARIS)

Ferromatik Milacron GmbH, Malterdingen (VDMA)

Festo AG & Co. KG, Esslingen (MTSW, VDMA) Fetzer Medical GmbH & Co. KG, Tuttlingen (MM)

ficonTEC Service GmbH, Achim (VDMA)

Fidia Pharma GmbH, Monheim (BVMED)

FiHH Das Fortbildungsinstitut Harste-Westendorf GmbH & Co. KG, Hamburg (LSN)

FINK NUMRICH Patentanwälte PartmbB, München (MV)

FISBA AG. St. Gallen (SPECTARIS)

Fischer Information Technology AG, Radolfzell (MM)

Fischer QMS, Koblenz (MM)

Fischer System-Mechanik GmbH, Durchhausen (MM)

Fisher & Paykel Healthcare GmbH, Schorndorf (SPECTARIS)

Fleuchaus & Gallo Partnerschaft Patent- und Rechtsanwälte, München (FMP)

FLG Automation AG, Karben (VDMA)

FLO Medizintechnik GmbH, Melle (SPECTARIS)

FOBA Laser Marking + Engraving (Alltec GmbH), Selmsdorf (MM)

Fluoron GmbH, Ulm (FMP)

FMB Care GmbH, Salzkotten (SPECTARIS)

Förde Medic, Kiel (LSN)

For Life - Produktions- und Vertriebsgesellschaft für Heil- und

Hilfsmittel mbH, Berlin (BVMED)

for your eHealth GmbH, Weiden (MV)

FORÉCREU Deutschland GmbH, Troisdorf (VDMA)

Fork Labs, Lübeck (LSN)

Forschungsinstitut für Leder und Kunststoffbahnen gGmbH FILK, Freiberg (FMP)

 $Forum\ Angewand te\ Informatik\ und\ Mikrosystem technik\ e.V.\ (FAIM),$

Freiburg (MTSW)

forumOphthalmologicum, Hamburg (LSN)

FRAMOS GmbH, Pullach (VDMA)

Frank Scheil Industrievertretungen, Waghäusel (IVAM)

Franz Binder GmbH & Co. Elektrische Bauelemente KG,

Neckarsulm (MM)

Franz Kalff GmbH, Euskirchen (BVMED)

Fraunhofer EMI, Freiburg (MTSW)

Fraunhofer IFAM – Institut für Fertigungstechnik und Angewandte

Materialforschung, Bremen (LSN)

Fraunhofer IIS-SCS, Nürnberg (FMP)

Fraunhofer IIS, Erlangen (MV)

Fraunhofer IMM, Mainz (MTSW)

Fraunhofer Institut für Produktionstechnik und Automatisierung IPA, Stuttgart (MM)

Fraunhofer IPA, Stuttgart (MTSW)

Fraunhofer IPM, Freiburg (MTSW)

Fraunhofer IPMS, Dresden (MTSW)

Fraunhofer ISE, Freiburg (MTSW)

Dresden (FMP)

Fraunhofer IVV Dresden, Dresden (VDMA)

Fraunhofer MEVIS - Institut für Digitale Medizin, Lübeck (LSN)

Fraunhofer-Allianz Vision, Fürth (IVAM)

Fraunhofer-Einrichtung für Mikrosysteme und Festkörper-Technologien EMFT, München (FMP)

Fraunhofer-Institut für Additive Produktionstechnologien IAPT, Hamburg (LSN)

Fraunhofer-Institut für Arbeitswirtschaft und Organisation IAO, Stuttgart (VDMA)

Fraunhofer-Institut für Elektronenstrahl- und Plasmatechnik FEP,

Fraunhofer-Institut für Elektronische Nanosysteme ENAS, Paderborn (IVAM)

Fraunhofer-Institut für Fertigungstechnik und Angewandte Materialforschung IFAM, Bremen (IVAM)

Fraunhofer-Institut für Grenzflächen- und Bioverfahrenstechnik IGB, Stuttgart (FMP)

Fraunhofer-Institut für Integrierte Schaltungen IIS, Erlangen (FMP)

Fraunhofer-Institut für Integrierte Schaltungen IIS – Institutsteil für Entwicklung Adaptiver Systeme, Dresden (FMP)

Fraunhofer-Institut für integrierte~Schaltungen IIS SCS Fraunhofer-Arbeitsgruppe für Supply Chain Services, Nürnberg (FMP)

Fraunhofer-Institut für Keramische Technologien und Systeme IKTS, Dresden (VDMA)

Fraunhofer-Institut für Lasertechnik ILT, Aachen (IVAM, SPECTARIS)

Fraunhofer-Institut für Mikroelektronische Schaltungen und Systeme IMS, Duisburg (IVAM)

Fraunhofer-Institut für Mikrotechnik u. Mikrosysteme IMM, Mainz (FMP, IVAM)
Fraunhofer-Institut für Organische Elektronik, Elektronenstrahl- und
Plasmatechnik FEP, Dresden (IVAM)

Fraunhofer-Institut für Photonische Mikrosysteme IPMS, Dresden (IVAM)
Fraunhofer-Institut für Produktionstechnik und Automatisierung IPA,
Stuttgart (FMP)

Fraunhofer-Institut für Silicatforschung ISC Außenstelle Bronnbach, Wertheim (FMP)

Fraunhofer-Institut für Siliziumtechnologie ISIT, Itzehoe (IVAM, VDMA)
Fraunhofer-Institut für Zuverlässigkeit und Mikrointegration IZM, Berlin (IVAM)
Fraunhofer-Institut für Silicatforschung ISC, Würzburg (FMP)

Fraunhofer-Institut für Integrierte Schaltungen IIS EZRT, Fürth (FMP)

Fraunhofer-Zentrum für Angewandte Nanotechnologie CAN, Hamburg (LSN)

Fraunhofer-Institut für Integrierte Schaltungen IIS EZRT, Würzburg (FMP)

Freiburg Wirtschaft Touristik und Messe GmbH & Co. KG, Freiburg (MTSW)

FRESENIUS SE & Co. KGaA, Bad Homburg (BVMED)

Freudenberg IT SE & Co. KG, Weinheim (VDMA)

Freudenberg Medical Europe GmbH, Kaiserslautern (BVMED, MM)

Freudenberg Sealing Technologies GmbH & Co. KG, Weinheim (VDMA)

Friedrich Alexander Universität, Erlangen (MV)

Friedrich Daniels Medical GmbH, Aldingen (MM)

Friedrich-Alexander-Universität Erlangen-Nürnberg – FAU LS für Photonische Technologien (LPT), Erlangen (FMP)

Friedrich-Alexander-Universität Erlangen-Nürnberg Lehrstuhl für Anästhesiologie, Erlangen (FMP)

Friedrich-Alexander-Universität Erlangen-Nürnberg Lehrstuhl für Informatik 5 Mustererkennung, Erlangen (FMP)

Friedrich-Alexander-Universität Erlangen-Nürnberg Lehrstuhl für Medizinische Informatik, Erlangen (FMP)

Friedrich-Alexander-Universität Erlangen-Nürnberg LS f. Fertigungsautomatisierung und~Produktionssystematik, Erlangen (FMP)

Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen (FMP)

Frimed Medizintechnik GmbH, Tuttlingen (MM)

Fritz Stephan GmbH, Gackenbach (SPECTARIS)

FRIWO Gerätebau GmbH, Ostbevern

FRIZ Biochem GmbH, Neuried (FMP)

 ${\sf FRT\ GmbH}, \, {\sf Bergisch\ Gladbach\ (IVAM)}$

fruitcore robotics GmbH, Konstanz (MM, VDMA)

FSQ Functional Safety & Quality Experts GmbH, München (MV) FSR.Consulting Unternehmensberatung GmbH, Erlangen (MV)

Tort.consulting official entire interest and district the first and the

FUCHS SCHMIERSTOFFE GmbH, Mannheim (VDMA)

 $F\"{u}rstenberg-Gymnasium\ Donaueschingen,\ Donaueschingen\ (MM)$

Fuhrmann GmbH, Much (BVMED)

Fumedica Medizintechnik GmbH, Hechingen (BVMED)

Funke Engineering GmbH, Umkirch (MTSW)

Funke-Medical AG, Raesfeld (BVMED)

FZI - Forschungszentrum Informatik, Karlsruhe (FMP, MTSW)

G

G-SURG GmbH, Seeon (FMP)

G. Albert Storz, Wurmlingen (MM)

G. Heinemann Medizintechnik GmbH, Kaltenkirchen (LSN)

GADV mbH, Böblingen (MM)

Galifa Contactlinsen AG, St. Gallen (SPECTARIS)

Galilei Software GmbH, Bad Tölz (FMP)

Gambro Dialysatoren GmbH, Hechingen (BVMED)

GAMMARAY M.IT GmbH, Hamburg (LSN)

Garz & Fricke GmbH, Hamburg (LSN)
GATTAguant GmbH, Hiltpoltstein (FMP)

GAUDLITZ GmbH, Coburg (FMP)

GBN Systems GmbH, Buch am Buchrain (FMP, MV)

GE Global Research Zweigniederlassung der General Electric

Deutschland Holding GmbH, München (FMP)

Gebr. Becker GmbH, Wuppertal (VDMA)

Gebr. Heller Maschinenfabrik GmbH, Nürtingen (VDMA)

Gebr. Schwarz GmbH, Rottweil-Neukirch (MM)

Gebr. Tigges GmbH & Co. KG, Oelde (VDMA)

Gebrüder Eberhard GmbH & Co. KG, Nordheim (VDMA)

Gebrueder Hoerr GmbH, Villingendorf (MM)
Gebrüder Martin GmbH & Co.KG, Tuttlingen (SPECTARIS)

PEEAZ mbH. Forehbeim (MV)

GEFAZ mbH, Forchheim (MV)

Gefeg-Neckar Antriebssysteme GmbH, Gosheim (MM)

GEMÜ Gebrüder Müller Apparatebau GmbH & Co. KG, Niedernhall-Waldzimmern (MTSW)

General Electric Deutschland Holding GmbH, Frankfurt am Main (VDMA) Georg Alber GmbH & Co. KG, Renquishausen (MM)

GEORGII KOBOLD GmbH & Co. KG, Horb am Neckar (FMP)

Gerhard Schubert GmbH, Crailsheim (VDMA)

GerroMed Pflege- und Medizintechnik GmbH, Hamburg (BVMED, LSN) Geschwentner moulds & parts GmbH & Co. KG, Deilingen (MM) Gesundheitsforum Segeberg e.V., Bad Segeberg (LSN)

Gesundheitsnetz Qualität und Effizienz eG, Nürnberg (MV)

GETEMED Medizin- und Informationstechnik AG, Teltow (SPECTARIS)

GEUDER AG, Heidelberg (FMP, MM)

GEWATEC GmbH & Co. KG, Wehingen (MM)

GF Machining Solutions GmbH, Schorndorf (MM)

GFH GmbH, Deggendorf (IVAM, MM)

GFS Gesellschaft für orthopädische Schienen mbH, Kummerfeld (LSN)

GFS Gesellschaft für Sensorik GmbH, Villingen-Schwenningen (MM)

GHC - German Health Care GmbH, Wees (LSN)

GHD GesundHeits GmbH Deutschland, Ahrensburg (BVMED)

Gimmi GmbH, Tuttlingen (MM, SPECTARIS)

Gindele GmbH, Neuhausen (MM)

Given Imaging GmbH, Hamburg (LSN)

GKM Gesellschaft für Therapieforschung mbH, München (FMP)

Gläser GmbH, Horb (VDMA)

GLAUKOS Germany GmbH, Wiesbaden (BVMED)

Global-dent GmbH, Bargteheide (LSN)

Globalmind GmbH, Hamburg (LSN)

Globus Medical Germany GmbH, Düsseldorf (BVMED)

GLOOR MEDICAL GmbH, Lübeck (LSN)

GMA Gesellschaft für medizinische Ausbildung, Erlangen (MV)

GMC-I Messtechnik GmbH, Nürnberg (VDMA)

GNA Biosolutions GmbH, Martinsried (FMP, MTSW)

GO German Orthopedic Implants GmbH, Hamburg (LSN)

GoGaS Goch GmbH & Co. KG, Dortmund (FMP)

Goth und Partner, Stadtbergen (FMP)

GP Medical Instruments GmbH, Lübeck (LSN)

GPE Plast Engineering GmbH, Neumünster (LSN)

GRÄSSLIN SÜD GmbH, Villingen-Schwenningen (MM)

Greggersen Gasetechnik GmbH, Hamburg (LSN)

Greiner GmbH, Pleidelsheim (SPECTARIS)

Greisen Produkt Service GmbH, Hamburg (LSN)

Grey Innovation Group Pty Ltd, Richmond (FMP)

Grey Innovation Pty. Ltd., Oberhaching (MV)

GROB-WERKE GmbH & Co. KG, Mindelheim (MM, VDMA)

Grossenbacher Systeme AG, St. Gallen (FMP)

GRT GmbH & Co. KG, Hamm (IVAM)

GRW Gebr. Reinfurt GmbH & Co. KG, Rimpar (VDMA)

GS1 Germany GmbH, Köln (VDMA)

GSB-Wahl GmbH, Aichwald (MTSW)

GTI medicare GmbH, Hattingen (SPECTARIS)

Gühring KG, Albstadt (VDMA)

Günter Bissinger Medizintechnik GmbH, Teningen (MM)

Günther Wesarg GmbH, Hamburg (LSN)

GVB-geliMED E.Kfm, Bad Segeberg (LSN)

GVS-Großverbraucherspezialisten eG, Friedewald (BVMED)

GWQ Service Plus AG, Düsseldorf (MV)

Н

H. + H. Maslanka Chirurgische Instrumente GmbH, Tuttlingen (FMP, MM)

H. P. Zenner Medical GmbH & Co. KG, Tübingen (MM)

H.C. Grosse GmbH & Co. KG, Daldorf (LSN)

H&B Elektronic GmbH & Co.KG, Deckenpfronn (MM)

H+K Beschichtungstechnik GmbH, Aldingen (MM)

HAAG-STREIT DEUTSCHLAND GmbH, Wedel (LSN)

Haag-Streit Surgical GmbH & Co. KG, Wedel (LSN, SPECTARIS)

Haas Schleifmaschinen GmbH, Trossingen (VDMA)

HÄCKER Automation GmbH, Waltershausen (IVAM)

HÄLSA Pharma GmbH, Lübeck (SPECTARIS)

HAEMONETICS GmbH, München (BVMED)

HAHN Automation Süd GmbH, Villingen-Schwenningen (MM, VDMA) Hahn-Schickard-Gesellschaft für angewandte Forschung e.V.,

Freiburg (FMP)

 $\label{thm:chickard-Gesellschaft für angewandte Forschung e.V.,} Hahn-Schickard-Gesellschaft für angewandte Forschung e.V.,$

Villingen-Schwenningen (FMP, IVAM, MTSW, MM)

HAIL-TEC GmbH, Hohenstein (MM)

Haimer GmbH, Igenhausen (VDMA)

Hainbuch GmbH, Marbach (VDMA)

HAKOS Präzisionswerkzeuge Hakenjos GmbH, Freiburg (VDMA)

Haller-Jauch GmbH, Villingen-Schwenningen (MM)

Hamamed Klinik-Spezialprodukte GmbH, Reinbek (LSN)

Hamburg Wasser, Hamburg (LSN)

Handelsvertretung Eibl, Velden (FMP)

Handicare GmbH Porta Westfalica (SPECTARIS)

Handwerkskammer Konstanz, Konstanz (MM)

hannoverimpuls GmbH, Hannover (FMP)

HANS HEPP GmbH & Co. KG, Hamburg (BVMED, LSN)

Hans Müller HMP Medizintechnik GmbH, Nürnberg (MV, SPECTARIS)

HANS O. MAHN GmbH & Co. KG. Stapelfeld (LSN)

Hansaton Akustik GmbH, Hamburg (LSN)

Hanse-Medizintechnik Dipl.-Ing. P. Hettmer GmbH, Ratekau (LSN)

Harmonic Drive SE, Limburg/Lahn (FMP, VDMA)

HARTING AG - Mitronics, Biel/Bienne 6 (MM)

Haßberg Kliniken, Haßfurt (FMP)

HAW Hochschule für Angewandte Wissenschaften Hamburg, Hamburg (LSN)

HAWE Altenstadt Holding GmbH, Altenstadt (VDMA)

HAWE Micro Fluid GmbH, Barbing (VDMA)

HAWK Hochschule f. angewandte Wissenschaft u. Kunst, Hildesheim (VDMA)

HB Technologies AG, Tübingen (FMP)

HB-Therm GmbH, Siegburg (MM)

HDI Global SE, München (FMP)

HDI-Gerling Industrie Versicherung AG, Hannover (FMP)

HE System Electronic GmbH, Veitsbronn (FMP)

HealthCapital - Cluster Healthcare Industries Berlin-Brandenburg, Berlin

Healthcare Denmark, Odense (FMP)

Heberlein AG, Wattwil (MM)

HEBUmedical GmbH, Tuttlingen (MM)

Hechinger Automotive GmbH, Villingen-Schwenningen (MM)

HECHT Contactlinsen GmbH, Au (SPECTARIS)

Heidelberg Engineering GmbH, Heidelberg (SPECTARIS)

Heidelberg Instruments Mikrotechnik GmbH, Heidelberg (MTSW)

HEIKO WILD GmbH, Tuttlingen (MM)

Heimbeatmungsservice Brambring Jaschke GmbH, Landberg/Lech (MV)

Hein & Oetting Feinwerktechnik GmbH, Hamburg (LSN, VDMA)

HEINE Optotechnik GmbH & Co. KG, Gilching (SPECTARIS)

Heinen + Löwenstein GmbH & Co. KG, Hamburg (LSN)

HEINEN Automation, Monschau (VDMA)
Heinrich Burghart Elektro- und Feinmechanik GmbH, Wedel (LSN)

Heinrich Ziegler GmbH, Forchheim (MV)

Heinrich-Heine-Universität Düsseldorf, Düsseldorf (IVAM)

Heinz Herenz Medizinalbedarf GmbH, Hamburg (LSN)

Heinz Kurz GmbH, Dußlingen (MM)

HEITEC AG Systemhaus für industrielle Lösungen, Erlangen (VDMA)

HEITEC AG, Eckental (FMP, MV)

HEITEC PTS GmbH, Kuchen (VDMA)

HEK medical GmbH, Ascheberg (LSN)

HEKUMA GmbH, Eching (VDMA)

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HELIOS-PREISSER GmbH, Gammertingen (MM)

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Helmholtz Zentrum München Deutsches Forschungszentrum für Gesundheit und Umwelt (GmbH) Institut für Strukturbiologie, Neuherberg (FMP)

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KG, Trossingen (MM) Hittech Prontor GmbH, Bad Wildbad (SPECTARIS) Iftest AG, Wettingen (FMP) IFU Institut für Unternehmensforschung OR GmbH, Nürnberg (FMP) him-technic, Ottersweier (IVAM, MM) HMG Systems Engineering GmbH, Fürth (FMP, MV) IGZ Würzburg, Würzburg (FMP) HMT Medizintechnik GmbH, Maisach (BVMED) IHK Karlsruhe, Karlsruhe (MTSW) HNP Mikrosysteme GmbH, Schwerin (IVAM) IHK Nürnberg für Mittelfranken, Nürnberg (MV) Hobe GmbH, Baienfurt (VDMA) IHK Schwarzwald-Baar-Heuberg, Villingen-Schwenningen (MTSW, MM) Hochschule Ansbach Fachbereich Wirtschaftsinformatik, Ansbach (FMP) IHK Südlicher Oberrhein, Freiburg (MTSW) Hochschule Ansbach Fakultät Biomedizinische Technik, Ansbach (FMP) ILC GmbH, Bexbach (VDMA) Hochschule Esslingen, Göppingen (MTSW) Ilg Medizintechnik GmbH, Durchhausen (MM) Hochschule für angewandte Wissenschaften Ansbach, Ansbach (FMP) ILO electronic GmbH, Quickborn (LSN) Hochschule für angewandte Wissenschaften Coburg Institut für Sensorimbus AG, Möhrendorf (MV) und Aktortechnik (ISAT), Coburg (FMP) iMEDgine GmbH, Lichtenfels (FMP) Hochschule für angewandte Wissenschaften Landshut Fakultät für Elektroimplantcast GmbH, Buxtehude (BVMED) technik und~Wirtschaftsingenieurwesen, Landshut (FMP) Impregion Material Technology GmbH, Lübeck (LSN) Hochschule Furtwangen (HFU), Furtwangen (MM, MTSW) Impulse Dynamics Germany GmbH, Stuttgart (BVMED) Hochschule Furtwangen Kompetenzzentrum für spanende Fertigung, IMS CHIPS, Stuttgart (MTSW) Villingen-Schwenningen (VDMA) IMS Gear SE & Co. 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ISG Intermed Service GmbH & Co. KG, Geesthacht (LSN) ISS AG, Integrated Scientific Services, Biel/Bienne (MM) IST METZ GmbH, Nürtingen (FMP, VDMA) iSYS Medizintechnik GmbH, Kitzbühel (FMP) IT-Labs GmbH, Nürnberg (MV) it.conex GmbH, Zimmern (MM) it@business GmbH & Co. KG, Spaichingen (MM) ITellence GmbH, Spaichingen (MM) iThera Medical GmbH, München (FMP)

ITK Engineering GmbH, Rülzheim (FMP) ITS Industrie- und Technozentrum Schaffhausen, Schaffhausen (MM) ITStrategen GmbH, Karlsruhe (MTSW) ITV Denkendorf Produktservice GmbH (ITVP), Denkendorf (MM) J&J Vision AMO Germany GmbH, Ettlingen (SPECTARIS) Jakobi Dental GmbH, Schiffweiler (MM) Jauch Quartz GmbH, Villingen-Schwenningen (MM) JCD Technology GmbH, Hamburg (LSN) Jenaer Antriebstechnik GmbH, Jena (VDMA) JenaValve Technology GmbH, München (BVMED) JENOPTIK Advanced Systems GmbH, Wedel (LSN) JENOPTIK Optical Systems GmbH, Jena (IVAM) JFR Medical Instruments GmbH, Kiel (LSN) Jobst Technologies GmbH, Freiburg (IVAM) Johannes Kepler Universität Linz Institut für Chemie der Polymere, Linz (FMP) Johnson & Johnson Institute, Norderstedt (LSN) Johnson & Johnson Medical GmbH, Norderstedt (BVMED, LSN, SPECTARIS) Johnson & Johnson Vision AMO Germany GmbH, Ettlingen (BVMED) Johnson Matthey Piezo Products GmbH, Redwitz (FMP) Jones Day, München (FMP) Jongen Werkzeugtechnik GmbH, Willich (VDMA) Jopp Electronics GmbH, Villingen-Schwenningen (MM) Jüke Systemtechnik AG, Altenberge (SPECTARIS) JÜKE Systemtechnik GmbH, Altenberge (FMP, IVAM) Juka Pharma GmbH, Zeutern (BVMED) jung diagnostics GmbH, Hamburg (LSN) K-LINE Praxislösungen GmbH, Kiel (LSN) K. Lancki und M. Lancki, Berlin (IVAM) Käfer Werkzeugbau GmbH, Besigheim (VDMA) Kaeser Kompressoren SE, Coburg (VDMA) KAISER-AMM GmbH, Forchheim (MV) Kammerer MedTec GmbH & Co. KG, Bodman-Ludwigshafen (MM) Kaneka Pharma Europe N.V., German Branch, Eschborn (BVMED) Kanon.Systems GmbH, Hamburg (LSN) Kantar GmbH Health Division, München (FMP) kanyo® - Fachverlag Gesundheit & Medizin GmbH & Co. KG, Nürnberg (MV) Karl Kaps GmbH & Co.KG, Aßlar / Wetzlar (SPECTARIS) Karl Klappenecker GmbH & Co. KG, Tuttlingen (MM) Karl Küfner GmbH & Co. KG, Albstadt (MM) Karl Leibinger Medizintechnik GmbH & Co. KG, Mühlheim (MM, SPECTARIS) KARL MAYER Textilmaschinenfabrik GmbH, Obertshausen (VDMA) Karl Schuessler GmbH+Co. KG, Bodelshausen (VDMA) Karl Storz SE & Co. KG, Tuttlingen (MM, SPECTARIS) Karl-Heinz Thiele GmbH, Schenefeld (LSN) Karlsruher Institut für Technologie WBK, Karlsruhe (MTSW) KATEK Frickenhausen GmbH, Frickenhausen (FMP) Katek GmbH, Grassau (FMP) Kaymogyn GmbH, Berlin (BVMED) KCI Medizinprodukte GmbH | An Acelity Company, Wiesbaden (BVMED) KEK GmbH, Laußnitz/ Sachsen (SPECTARIS) Kelch GmbH, Weinstadt (VDMA) Kendrion (Villingen) GmbH, Villingen-Schwenningen (MM) Kendrion Kuhnke Automation GmbH, Malente (SPECTARIS, VDMA) keytech Süd GmbH, Sulz (MM) KH Medical GmbH, Helmbrechts (MV) Kiefel GmbH, Freilassing (VDMA) Kirchner & Wilhelm GmbH + Co. KG, Asperg (SPECTARIS) Kläger Spritzguss GmbH & Co. KG, Dornstetten (MM) Klingel medical metal GmbH. Pforzheim Klinik für Allgemeine, Unfall- und Wiederherstellungschirurgie, München (FMP) Klinik für Orthopädie und Unfallchirurgie~Klinikum rechts der Isar der Technischen Universität München, München (FMP)

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Klinikum Fürth, Fürth (MV)

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Klinikum Nürnberg Institut für Klinikhygiene und Klinische Infektiologie, Nürnberg (FMP)

Klinikum Nürnberg Studienzentrum, Nürnberg (FMP)

Klinikum Nürnberg, Nürnberg (FMP, MV)

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Klinikum rechts der Isar der TU München, München (FMP)

Klinikum Rosenheim, Rosenheim (FMP)

Klocke Nanotechnik GmbH, Aachen (IVAM)

KLS Martin Medical GmbH & Co. KG, Tuttlingen (MM)

KME Klinik Medizintechnik Eppendorf GmbH, Hamburg (LSN)

Knocks Fluid-Technik GmbH, Selm (VDMA)

Knoell Germany GmbH, Mannheim (FMP)

Knowledge Department GmbH, Nürnberg (FMP)

knowledgepark GmbH, München (FMP)

knowledgepark GmbH, Neu-Isenburg (FMP)

KOB GmbH, Wolfstein (BVMED)

Koberg & Tente GmbH + Co. KG, Münster (SPECTARIS)

KOCH Pac-Systeme GmbH, Pfalzgrafenweiler

Kögel GmbH, Oberderdingen (SPECTARIS)

Königsee Implantate GmbH, Allendorf (SPECTARIS)

KOEPFER Engineering GmbH, Furtwangen (MM)

Körber AG, Hamburg (VDMA)

Komet Medical - Gebr. Brasseler GmbH & Co. KG, Lemgo (SPECTARIS)

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Konstruktion Baumann OHG, Herbolzheim (MM)

Kontaktstelle Wissens- und Technologietransfer (WTT-Stelle), Erlangen (MV)

KONZELMANN GmbH, Löchgau (VDMA)

Koop Industrial Design, Hamburg (LSN)

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Krauth + Timmermann GmbH, Hamburg (LSN)

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KUMAVISION AG, Stuttgart (MM, VDMA)

Kundo XT GmbH / OTG Obergfell Technology Group AG, St. Georgen im Schwarzwald (MM)

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Kunststoff-Institut Südwest GmbH & Co. KG, Villingen-Schwenningen (MM)

Kunststoff-Zentrum in Leipzig gGmbH, Leipzig (IVAM)

Kurt Grützmann Feinmechanik GmbH, Reinfeld (LSN)

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Labor LS SE & Co. KG. Bad Bocklet (BVMED, EMP)

Labotect Labor-Technik Göttingen GmbH, Rosdorf (SPECTARIS)

Laetus GmbH, Alsbach-Hähnlein (VDMA)

Lakèl translation, Landshut (FMP)

Landesinnung Chirurgiemechanik, Tuttlingen (MM, SPECTARIS)

Landesmesse Stuttgart GmbH, Stuttgart (MTSW)

Landkreis Rottweil, Rottweil (MM)

Landratsamt Schwarzwald-Baar-Kreis, Villingen-Schwenningen (MM)

Landratsamt Tuttlingen, Tuttlingen (MM)

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LAROMED GmbH, Schleswig (LSN)

Laser Zentrum Hannover e.V., Hannover (IVAM)

Laser-Laboratorium Göttingen e.V., Göttingen (IVAM)

LaserIDENT GROUP GmbH, Bad Vilbel (MTSW)

LASERVORM GmbH, Altmittweida (VDMA)

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LEE Hydraulische Miniaturkomponenten GmbH, Sulzbach (IVAM)

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Leica Biosystems Deutschland GmbH, Norderstedt (BVMED)

Leica Microsystems CMS GmbH, Wetzlar (SPECTARIS)

Leichtbau-Zentrum Sachen GmbH, Dresden (VDMA)

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LEISTRITZ AG, Nürnberg (VDMA)

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LEJ - Leistungselektronik JENA GmbH, Jena (SPECTARIS)

Lennartz GmbH Medizintechnik, Hamburg (LSN)

LEONI Kabel GmbH, Roth (MV)

LEUKOCARE AG, Martinsried (FMP)

Leuze electronic GmbH + Co. KG, Owen (VDMA)

Leybold GmbH, Köln (VDMA)

Libify Technologies GmbH, München (FMP)

LICHER MT GmbH Medical Therapy, Wedemark (BVMED)

LifeTool gemeinnützige GmbH, Linz (FMP)

LightGuideOptics Germany GmbH, Meckenheim (BVMED)

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LINDE Gas Therapeutics GmbH, Oberschleißheim (SPECTARIS)

Lingroup GmbH, Karlsruhe (MM)

LISA Laser Products GmbH, Katlenburg-Lindau (MM)

litos/GmbH. Ahrensburg (LSN)

LivaNova Deutschland GmbH, München (BVMED)

LLS ROWIAK LaserLabSolutions GmbH, Hannover (MM, SPECTARIS)

LMT Medical Systems GmbH, Lübeck (LSN)

LMU München BioSysNet, München (FMP)

Löwenstein Medical GmbH & Co. KG, Bad Ems (SPECTARIS)

Löwenstein medical innovation GmbH & Co. KG, Kronberg (SPECTARIS)

LOGICA Medizintechnik GmbH, Oldenburg / Holstein (LSN)

Logima Software GmbH, Nürnberg (FMP)

Lohmann & Rauscher International GmbH & Co. KG. Neuwied (BVMED)

Lophius Biosciences GmbH, Regensburg (FMP) LP - Medical Branding GmbH, Hamburg (LSN)

LPKF Laser & Electronics AG, Garbsen (IVAM)

LPKF WeldingQuipment GmbH, Fürth (FMP)

LPW Reinigungssysteme GmbH, Riederich (MM) LR pure systems, Ditzingen-Heimerdingen (MM)

LRE Medical GmbH, München (FMP)

LT Ultra-Precision Technology GmbH, Herdwangen-Schönach (VDMA)

LTB Germany Limited, Lübeck (LSN)

Lti Motion GmbH, Lahnau (VDMA)

Ludwig Bertram GmbH, Isernhagen (BVMED)

Lumis International GmbH, Berlin

Luneau Technology Deutschland GmbH, Ratingen (SPECTARIS)

LVI - Landesverband der Baden-Württembergischen Industrie e.V., Stuttgart (MTSW)

M

m law group, München (FMP)

M-O-T Mikro- und Oberflächentechnik GmbH, Saarbrücken (IVAM)

m-u-t GmbH Meßgeräte für Medizin- und Umwelttechnik, Wedel (LSN)

M.C.S. ConPharm GmbH, Oststeinbek (LSN)

M.G.Kurth GmbH, Schwarzenbek (LSN)

M&M Software GmbH, St. Georgen (MM)

M&P Unternehmensberatung GmbH, Erlangen (MV)

m2 Handels- u. Vertriebs GmbH, Engelskirchen (SPECTARIS)

M3i GmbH, München (FMP)

MABAG Medizinische Apparate Bau Aktiengesellschaft, Barsbüttel (LSN)

macio GmbH, Kiel (VDMA)

macs Sofware GmbH, Zimmern (MM)

MAD Schwarz GmbH & Co. KG, Kolbingen (MM)

MagForce AG, Berlin (BVMED, FMP)

Magnet-Schultz GmbH & Co. KG, Memmingen (VDMA)

Magonovum® GmbH & Co. KG, Wurmlingen (MM)

Mahr GmbH, Göttingen (VDMA)

MAICO Diagnostics GmbH, Berlin (SPECTARIS)

MAICO Elektroapparate-Fabrik GmbH, Villingen-Schwenningen (MM)

Maier Werkzeugmaschinen, Wehingen (VDMA)

Mainstay Medical GmbH, München (BVMED)

MAIT Germany GmbH, Rottweil (MM)

Makino GmbH, Kirchheim (MM, VDMA)

Manfred Quast Röntgentechnik, Hamburg (LSN)

Manz AG, Reutlingen (VDMA)

MAPAL Dr. Kress KG, Aalen (VDMA)

MaRhyThe-Systems GmbH & Co. KG, Gröbenzell (FMP)

MARIS MedTech Services GmbH, Hamburg (LSN)

Marposs GmbH, Weinstadt (VDMA)

Marquardt GmbH, Rietheim-Weilheim (MM)

MAS GmbH, Leonberg (VDMA)

Maschinenbau Kitz GmbH, Troisdorf (VDMA)

Matachana Germany GmbH, Selmsdorf (SPECTARIS)

Mate iT, Villingen-Schwenningen (MM)

Matern Consulting, Buchenberg (MM)

MATHYS Orthopädie GmbH, Bochum (BVMED)

MATTES Instrumente GmbH, Tuttlingen (MM)

Mauser-Werke Oberndorf Maschinenbau GmbH, Oberndorf (VDMA)

Max Hauser Süddeutsche Chirurgiemechanik GmbH, Tuttlingen (MM)

Max-Planck-Innovation GmbH, München (FMP)

Maximal Dental GmbH, Bamberg (MV)

MDK Medizinischer Dienst der Krankenversicherung in Bayern, München (FMP)

MDK Medizinischer Dienst der Krankenversicherung in Bayern, Nürnberg (FMP)

Mebitech GmbH, Hamburg (LSN)

MED-EL Deutschland GmbH, Starnberg (FMP)

MED-EL Elektromedizinische Geräte Gesellschaft m.b.H., Innsbruck (FMP) medac Gesellschaft für klinische Spezialpräparate mbH, Wedel (BVMED)

medbo - Medizinische Einrichtungen des Bezirks Oberpfalz KU,

Regensburg (FMP)

MEDCERT Zertifizierungs- und Prüfgesellschaft für die Medizin GmbH,

Hamburg (LSN)

MedDrop GmbH, Hamburg (LSN)

MedEcon Ruhr GmbH, Bochum (IVAM)

MEDEL GmbH Medicine Electronics, Hamburg (LSN)

medi GmbH & Co. KG, Bayreuth (BVMED, MV)

medi-G GmbH, Leibertingen (MM)

Medi-Globe Technologies GmbH, Rohrdorf OT Achenmühle (BVMED, FMP)

Mediagnost Gesellschaft für Forschung und Herstellung von Diagnostika

GmbH, Reutlingen (FMP)

Mediagnost GmbH, Reutlingen (MTSW)

Medic-Center-Nürnberg, Nürnberg (MV)

Medical Device Services - DR. ROSSBERGER GmbH, Gilching (MM)

Medical Highlights Germany GmbH, Rohrdorf (MM)

Medical Mountains GmbH, Tuttlingen (IVAM)

Medical Targeting Technologies GmbH, Barum (MM)

Medical Valley Center GmbH, Erlangen (FMP, MV)

Medical Valley EMN e.V., Erlangen (FMP)

MedicalCommunications GmbH, Heidelberg (SPECTARIS)

MedicalMountains GmbH. Tuttlingen (MM)

MEDICARE Medizinische Geräte GmbH, Aurach (SPECTARIS)

Medicon eG, Tuttlingen (MM, SPECTARIS)

MEDICRO GmbH, Petersaurach (FMP)

medicut StentTechnology GmbH, Pforzheim (FMP)

Medidee Services Deutschland GmbH, Triberg (FMP)

Medidee Services SA, Epalinges (MM, MV)

medigration GmbH, Erlangen (FMP)

medilT GmbH, Lübeck (FMP)

MEDIK Hospital Design GmbH, Hamburg (LSN)

medimex GmbH, Limburg (BVMED)

MEDIPLAN Krankenhausplanungs GmbH, Hamburg (LSN)

Medipolis Infrastruktur GmbH, Jena (BVMED)

Mediq Holding Deutschland GmbH, Dresden (BVMED)

MEDITEC SOURCE GmbH & Co. KG, Tuttlingen-Nendingen (MM)

Medizin-Mechanik-Nord GmbH, Kiel (LSN)

Medizinische Medien Informations GmbH, Neu-Isenburg (BVMED)

Medizinisches Kompetenzzentrum 'Medizin im Grünen' c/o HCx

Consulting GmbH, Wendisch Rietz (FMP)

Medizinisches Laserzentrum Lübeck GmbH, Lübeck (LSN)

Medizintechnik & Sanitätshaus Harald Kröger GmbH, Massen (BVMED)

Medizintechnik Akademie, Reinbek (FMP)

Medizintechnik Promedt GmbH, Tornesch (LSN)

Medset Medizintechnik GmbH, Hamburg (LSN)

MedSurv GmbH, Nidderau (FMP)

MedTec & Science GmbH, Ottobrunn (FMP)

Medtronic GmbH, Meerbusch (BVMED)

MedXpert GmbH, Heitersheim (MM)

MeetNow! GmbH, Albstadt (MTSW)

megro GmbH & Co. KG Medizintechnischer Großhandel, Wesel (BVMED)

Meihack Messebau GmbH, Neuhausen ob Eck (MM)

Meiser Medical GmbH, Neuenstein (MM)

MELAG Medizintechnik oHG, Berlin (SPECTARIS)

Memmert GmbH + Co.KG, Schwabach (SPECTARIS)

Memo Design, Finning (FMP)

Merete GmbH, Berlin (BVMED)

Merz Dental GmbH, Lütjenburg (LSN)

Messer Group GmbH, Bad Soden (SPECTARIS)

metecon GmbH, Mannheim (FMP, MM, MV)

Method Park Holding AG, Erlangen (MV) Metronus GbR, Hamburg (LSN)

MEYER-HAAKE GmbH OBERMÖRLEN, Ober Mörlen (SPECTARIS)

MF Consulting, Erlangen (FMP, MV)

mfd Diagnostics GmbH, Wendelsheim (FMP)

Michael Flussfisch GmbH, Hamburg (LSN)

Michelfelder GmbH, Fluorn-Winzeln (MM)
Micon Medizintechnik GmbH, Quickborn (LSN)

Micreon GmbH. Hannover (IVAM)

Micro Lasertec Deutschland GmbH, Kirchhain (IVAM)

Micro MIM Japan Holdings Inc., Offenburg (IVAM, MM)

Micro Systems Technologies Management AG, Baar (MTSW)

Microdul AG Vertrieb Deutschland, Kandel (MTSW)

microfluidic ChipShop GmbH, Jena (IVAM)

MicroGenesis TechSoft GmbH, München (FMP) Micromed Medizintechnik GmbH, Wurmlingen (MM)

MICROMETAL GmbH, Müllheim/Baden (IVAM)

Micromotion GmbH, Limburg an der Lahn (IVAM)

Micronit GmbH, Dortmund (IVAM)

MicroPort CRM GmbH, München (BVMED)

MicroPort Scientific GmbH, Ratingen (BVMED)

microsensys GmbH, Erfurt (IVAM)

Microsystems Center Bremen (MCB), Bremen (IVAM)

microworks GmbH. Karlsruhe (MTSW)

midge medical GmbH, Berlin (FMP)

MiE medical imaging electronics GmbH, Seth (LSN)

Miele & Cie. KG, Gütersloh (SPECTARIS)

mikrolab Entwicklungsgesellschaft für Elektroniksysteme mbH, Fürth (FMP)

Mikron GmbH, Rottweil (VDMA)

Mikrop AG, Wittenbach (SPECTARIS)

Miller Präzisionswerkzeuge GmbH, Altenstadt (VDMA)

Miltenyi Biotec B.V. & Co. KG, Bergisch Gladbach (BVMED)

MindPeak GmbH, Hamburg (LSN)

Minebea Intec Bovenden GmbH & Co. KG, Bovenden (VDMA)

MinebeaMitsumi Tech Center Europe GmbH, Villingen-Schwenningen (MM_MTSW)

Minvera Group, Gröbenzell

Minova Technology GmbH, Rottweil (MM)

Mint Medical GmbH, Heidelberg (FMP)

MIP Europe GmbH, Hamburg (LSN)

MiQ GmbH & Co. KG. Tuttlingen (MM)

Mitsubishi Electric Europe B.V., Ratingen (VDMA)

MixFlex GmbH & Co. KG, Amtzell (MM)

MK-dent GmbH, Bargteheide (LSN)

mkf GmbH, Lederhose (VDMA)

MKS Instruments Deutschland GmbH, München (MTSW)

MMM Münchener Medizin Mechanik GmbH, Planegg (FMP)

MMT Micro Mechatronic Technologies GmbH, Siegen (IVAM)

Mobile Function GmbH, Villingen-Schwenningen (MM)

model-tray GmbH für rationellen Dental-Bedarf, Hamburg (LSN)

modiCAS GmbH, Erlangen (FMP)

Moeck & Moeck GmbH, Hamburg (LSN)

MÖDLHAMMER UG (haftungsbeschränkt), Lübeck (LSN)

Möller Medical GmbH, Fulda (FMP)

MÖLLER-WEDEL GmbH & Co. KG, Wedel (LSN)

Mölnlycke Health Care GmbH, Düsseldorf (BVMED)

Mohage Mommsen Handels Gesellschaft mbH, Berlin (BVMED)

MOIO GmbH, Fürth (FMP, MV)

MOJE-Keramik-Implantate GmbH & Co.KG, Petersberg (FMP)

Molecular Health GmbH, Heidelberg (BVMED)

mono:consulting~Ingenieurbüro Dr. Monika Nörr, Geretshausen (FMP)

Morali Produktionstechnik GmbH, Zimmern (MM)

Morphose HealthCare GmbH, Neumarkt (MV)

motan Holding GmbH, Konstanz (VDMA)

MPDV Mikrolab, Mosbach (VDMA)

MPV MEDICAL GmbH, Putzbrunn (SPECTARIS)

MR:comp GmbH, Gelsenkirchen (FMP)

MRI Ultrasound GmbH, Hamburg (LSN)

MS Ultraschall Technologie GmbH, Spaichingen (MM)

msg industry advisors ag, Ismaning (FMP, VDMA)

MT Promedt Consulting GmbH, St. Ingbert (LSN)

MTC Medical Technology Consultants GmbH, München (MM)

MTM Medizn Technik Mauk, Norderstedt (LSN)

MTSW Medical UG, Konstanz (MM)

MTSW Meditel Service GmbH, Erlangen (MV)

mtt Medizintechnik GmbH, Tornesch (LSN)

Münchener Medizin Mechanik GmbH, Planegg (SPECTARIS)

multi-com GmbH & Co. KG, Ahrensburg (LSN)

multi-service-monitoring, Regensburg (FMP)

Multiphoton Optics GmbH, Würzburg (IVAM)

MULTIVAC Sepp Haggenmüller GmbH Co. KG, Wolfertschwerden (VDMA)

Murata Electronics Europe BV, Hoofddorp, Niederlande (MV)

Murgitroyd & Co. Ltd, München (FMP)

Murtfeldt Kunststoffe GmbH + Co. KG. Dortmund (VDMA)

MzM Zerspanungstechnik, Horst (LSN)

n:aip Deutschland GmbH, Fürth (MV)

Nabertherm GmbH, Lilienthal (VDMA)

NAGEL Maschinen- und Werkzeugfabrik GmbH, Nürtingen (VDMA)

Namsa Clinical and Consulting GmbH, Obernburg am Main (FMP)

Nano-Zentrum Euregio Bodensee e. V., Konstanz (MM)

Nanogate Medical Systems GmbH, Kierspe (VDMA)

nanosonics, Hamburg (LSN)

nass magnet GmbH, Hannover (VDMA)

NAWA HEILMITTEL GmbH, Nürnberg (BVMED, FMP)

NB GmbH, Gronau (IVAM)

Nemius Group GmbH, Offenbach am Main (FMP)

neoplas med GmbH, Greifswald (BVMED)

Nestlé Health Science Deutschland GmbH, Frankfurt/Main (BVMED)

Netherlands Business Support Office Stuttgart, Stuttgart (FMP)

Netscouts gGmbH, Nürnberg (MV)

Netzwerk NanoMat, Eggenstein-Leopoldshafen (IVAM)

Neumaier Logistics GmbH, Aschheim (FMP)

NeurOp German Branch Ltd., Würzburg (MV)

Nevro Germany GmbH, München (BVMED)

Newsenselab GmbH, Berlin (SPECTARIS)

NEXT.robotics GmbH & Co. KG, Villingen-Schwenningen (MM)

NIBERA Kunststoff GmbH, Deißlingen (MM)

Nijdra Engineering BV, Middenbeemster (FMP)

NIKKISO Europe GmbH, Hamburg (LSN)

Nipro D.Med Germany GmbH, Hamburg (LSN)

Nipro Diagnostics Germany GmbH, Ratingen (BVMED)

NIRLUS Engineering AG, Lübeck (LSN)

NIT Northern Institute of Technology Management gGmbH, Hamburg (LSN)

Nitzbon AG, Hamburg (LSN)

NMI Naturwissenschaftliches und Medizinisches Institut, Reutlingen

(MTSW, VDMA)

NMI, Reutlingen (MM)

NOBAMED Paul Danz AG, Wetter/Ruhr (BVMED)

noma-med GmbH, Harsum (BVMED)

NOPA Instruments Medizintechnik GmbH, Tuttlingen (MM)

nordcom medical systems GmbH, Heikendorf (LSN)

Nordmeditech medizinisch technische Geräte GmbH, Wees (LSN)

Norgren GmbH, Alpen (VDMA)

northh medical GmbH, Hamburg (LSN)

Northrop Grumman LITEF GmbH, Freiburg (MTSW)

Notion Systems GmbH, Schwetzingen (MTSW)

nova:med GmbH & Co. KG, Lonnerstadt (SPECTARIS)

Novapump GmbH, Jena (FMP)

Novartis Pharma GmbH, Nürnberg (MV)

Novo Klinik-Service GmbH, Bergheim (BVMED)

NRI Medizintechnik GmbH, München (FMP)

NSF PROSYSTEM GmbH, Hamburg (LSN)

NTI Kailer GmbH, Villingen-Schwenningen (MM)

NürnbergMesse GmbH, Nürnberg (FMP, MV)

numares AG, Regensburg (FMP)

nuova GmbH, Ratzeburg (LSN)

Nutricia GmbH, Erlangen (BVMED) NuVasive Germany GmbH, Bremen (BVMED)

NW Medsales Consulting, Neumarkt (MV)

nw-medsales Consulting, Neumarkt (FMP)

O

O.Meany MD&PM GmbH, Nürnberg (MV)

OAV - Ostasiatischer Verein e.V., Hamburg (IVAM)

Oberender AG, Bayreuth (MV)

OBERON GmbH Fiber Technologies, Wildau (SPECTARIS)

Octum GmbH, Ilsfeld (VDMA)

Oculus Optikgeräte GmbH, Wetzlar (SPECTARIS)

ODS GmbH, Kisdorf (LSN)

OECHSLER AG, Ansbach (FMP, MV)

Oemeta Chemische Werke GmbH, Uetersen (VDMA)

Oerlikon Balzers Coating AG, Balzers (MM)

OFA Bamberg GmbH, Bamberg (SPECTARIS) Okuvision GmbH, Reutlingen (BVMED)

Olympus Deutschland GmbH, Hamburg (LSN)

Olympus Europa Holding GmbH, Hamburg (LSN)

OLYMPUS EUROPA SE & CO. KG, Hamburg (LSN, SPECTARIS)

Olympus Surgical Technologies Europe, Hamburg (LSN)

Oncare GmbH, München (BVMED, FMP)

Ondics GmbH, Esslingen (MTSW)

oneIDentity+ GmbH, Ismaning (VDMA) ontec automation GmbH, Naila (VDMA)

Ontex Healthcare Deutschland GmbH, Lotte (BVMED)

OPED GmbH, Valley (BVMED)

OPEN MIND Technologies AG, Wessling (VDMA)

OptaSensor GmbH, Nürnberg (IVAM)

Optence e V Wörrstadt (IVAM)

Opticus GmbH & Co. KG, Kellinghusen (LSN)

optimed Medizinische Instrumente GmbH, Ettlingen (BVMED)

OPTIMUM datamanagement solutions GmbH, Karlsruhe (VDMA)

Opto GmbH, Gräfelfing (VDMA)

OptoMedical Technologies GmbH, Lübeck (LSN)

ORGMED-Unternehmensberatung, Erlangen (MV)

Orion Surgical Vertriebsges. mbH, Quickborn (LSN)

ORIPLAST Krayer GmbH, Neunkirchen (BVMED)

Orthobion GmbH, Konstanz (FMP)

Orthopädie Technik Bauche GmbH, Neustadt i. H. (LSN)

Orthopädie-Technik-Nord GmbH, Neumünster (LSN)

ORTHOS Orthopädietechnik GmbH, Hamburg (LSN)

Orthoscoot GmbH, Neusäß (BVMED)

Oskar Frech GmbH + Co. KG, Schorndorf (VDMA)

OST - Ostschweizer Fachhochschule, Buchs (MTSW)

Ostbayerische Technische Hochschule Amberg-Weiden Fakultät

Elektro- und Informationstechnik, Amberg (FMP)

Ostbayerische Technische Hochschule Amberg-Weiden Fakultät

Wirtschaftsingenieurwesen, Weiden (FMP)

Ostbayerische Technische Hochschule Amberg-Weiden Studiengang

Medizintechnik, Weiden (FMP)

Ostbayerische Technische Hochschule Amberg-Weiden, Weiden (MV)

Ostbayerische Technische Hochschule Regensburg Fakultät

Maschinenbau, Regensburg (FMP)

Ostbayrische Technische Hochschule Amberg-Weiden, Amberg (FMP)

Ostsee-Medizintechnik GmbH, Lübeck (LSN)

OT-Kiel GmbH & Co.KG, Kiel (LSN)

OTEC Präzisionsfinish GmbH, Straubenhardt (VDMA)

Oticon Deutschland GmbH, Hamburg (LSN)

Otsuka Pharma GmbH, Frankfurt am Main (BVMED)

Otto Röhrig Gesenkschmiede GmbH, Solingen (MM)

Otto Rüttgers GmbH + Co.KG, Solingen (SPECTARIS)

Ottobock SE & Co. KGaA, Duderstadt (BVMED, SPECTARIS)

Ovesco Endoscopy AG, Tübingen (MTSW, SPECTARIS)

oxaion GmbH, Ettlingen (FMP, MM, VDMA)

Р

P.J. Dahlhausen & Co. GmbH, Köln (BVMED)

PACE-Tec GmbH, Furtwangen (MTSW)

paconsult Swiss GmbH, Neuhausen am Rheinfall (MM)

Pajunk GmbH, Geisingen (MM)

PAJUNK Medical Produkte GmbH, Geisingen (BVMED)

PakuMed medical products gmbh, Essen (SPECTARIS)

Pall GmbH Medical, Dreieich (BVMED)

Panasonic Electric Works Europe AG, Ottobrunn (VDMA)

Panasonic Industry Europe, Ottobrunn (VDMA)

Paradigm Spine GmbH, Wurmlingen (BVMED, MM)

PARAM GmbH, Hamburg (BVMED)

PARI GMBH, Starnberg (SPECTARIS)

Parker Hannifin GmbH, Bielefeld (VDMA)

Parmaco Metal Injection Molding AG, Fischingen (MM)

PathoPlan GbR, Lübeck (LSN)

PAUL HARTMANN AG, Heidenheim (BVMED)

Paul Horn GmbH Hartmetall-Werkzeugfabrik, Tübingen (VDMA)

Paul Jilani, Hamburg (LSN)

Paul Weber GmbH & Co. KG Drehteile, Bösingen (MM)

PC Fresh Hygienische Systemreinigung und -desinfektion, Lübeck (LSN)

Pedilay Care GmbH, München (BVMED, FMP)

Pentax Europe GmbH, Hamburg (LSN, SPECTARIS)

Pereg GmbH, Waldkraiburg (FMP)

Perfood GmbH, Lübeck (LSN)

Peter Brehm GmbH Chirurgie-Mechanik, Weisendorf (FMP)

PETER BREHM GmbH, Weisendorf (BVMED, MV)

Peter Lazic GmbH, Tuttlingen (MM)

Petermann GmbH, Dombühl (MV)

Pfaff GmbH, Waldkirch (MM)

pfm medical ag, Köln (BVMED)

pfm medical titanium gmbh, Nürnberg (FMP)

PHADIMED Pharma-Medica Vertriebs-GmbH, Herne (BVMED)

Phalcon Consulting Dr. A. Emmendörffer, Stein AG (MM)

Phalcon Consulting, Niederrohrdorf (FMP)

Pharecon - Management Consultants in Life Science, Überlingen (MM)

Pharmacelsus GmbH, Saarbrücken (FMP)

Pharmaplan GmbH, Bad Homburg $\,$ (VDMA)

Pharmpur GmbH, Königsbrunn (FMP)

phenox GmbH, Bochum (SPECTARIS)

Philips GmbH Innovative Technologies, Hamburg (LSN)

Philips GmbH Market DACH, Hamburg (LSN)

Philips GmbH Respironics, Herrsching (SPECTARIS)

Philips Medical Systems DMC GmbH, Hamburg (LSN)

Philips Volcano International, Garching (BVMED)

Philyra UG, Berlin (FMP)

PHOENIX CONTACT Identification GmbH, Villingen-Schwenningen (MTSW)

PHOTON ENERGY GmbH, Ottensoos (MM)

Physiomed Elektromedizin AG, Schnaittach/Laipersdorf (FMP)

PhysioNova GmbH, Erlangen (MV)

Pi4 robotics, Berlin (VDMA)

Pirisec Orthopedic Prayer Rug, Schwentinental (OT Raisdorf) (LSN)

piur imaging GmbH, Wien (FMP)

PKCie - Prof. Köpper & Cie Management Consultants GbR, Frankfurt (FMP)

PKS Elektronik Produktions GmbH, Erlangen (FMP)

Plan Optik AG, Elsoff (IVAM)

Plasmatreat GmbH, Steinhagen (MTSW)

PLATO AG, Lübeck (LSN, VDMA)

plock consulting, Glienicke (FMP)

Pluradent AG & Co. KG, Hamburg (LSN)

PMT Präzision-Medizin-Technik GmbH, Weiskirchen (BVMED)

Polar Mohr Maschinenvertriebsgesellschaft GmbH & Co. KG, Hofheim (VDMA)

Poligrat Deutschland GmbH, München (VDMA)

Poliklinik für Zahnärztliche Prothetik Klinikum der Universität München –

Innenstadt, München (FMP)

Polymaterials AG, Kaufbeuren (FMP)

Polymath Analog, Stuttgart (MTSW) Polysecure GmbH, Freiburg (MTSW)

Polytec GmbH, Waldbronn (MTSW)

Polytech Domilens GmbH, Roßdorf (BVMED) POLYTECH Health & Aesthetics GmbH, Dieburg (BVMED)

Portabiles HealthCare Technologies GmbH, Erlangen (FMP, MV)

PPH GmbH, Erlangen (MV)

PPHealthcare Consulting GmbH, Ammersbek (LSN)

PRAEZIMED Service GmbH, Hamburg (LSN)

Praxis Dr. Hopf, Berlin (FMP)

Praxisnetz Nürnberg Süd e.V., Nürnberg (MV)

Precipart SA, Lyss (MM)

Precisis AG, Heidelberg (BVMED)

Pressebüro Amplifon Deutschland GmbH c/o kalia kommunikation GbR,

Berlin (LSN)

PressFinish Electronics GmbH, Germering (MV)

pro-beam AG & Co. KGaA, Planegg (VDMA)

ProCarement GmbH, Forchheim (MV)

Project Solutions GmbH, Ludwigshafen (FMP)

promark automation GmbH & Co. KG, Eigeltingen (MM)

Promedica Dental Material GmbH, Neumünster (LSN)

ProMediPac Medical Packaging Technology, Mengen (MM)

Protron Mikrotechnik GmbH, Bremen (IVAM) PROXESS GmbH, Rietheim-Weilheim (MM)

PSM Medical Solutions, Gunningen (MM)

Psyma Health & CARE GmbH, Rückersdorf (FMP)

PTA Pharma-Technischer Apparatebau GmbH & Co. KG, Mauern (FMP)

PTW Darmstadt, Darmstadt (VDMA)

PubliCare GmbH, Köln (BVMED)

PÜG Prüf- und Überwachungsgesellschaft mbH, Gäufelden (MM)

PÜSCHEL Automation GmbH & Co, KG, Lüdenscheid (VDMA)

PulmonX GmbH, München (BVMED)

Pulmotree Medical GmbH, München (FMP)

PULSION Medical Systems SE, Feldkirchen (BVMED)

O

QIAGEN Lake Constance GmbH, Stockach (MTSW)

QM-Beratung Jürgen Will, Neuhausen (MM)

QMedicus Consulting, Kassel (FMP)

QRelation Engineering Team GmbH, Hamburg (LSN)

ORM GmbH Möhrendorf (MV)

qtec consult GmbH, Lübeck (MM)

Qualitätsplan 24 GmbH, Lübeck (LSN)

Quality Analysis GmbH, Nürtingen (MM)

QualityLabs BT GmbH, Nürnberg (FMP, MV)

Qualitype GmbH, Dresden (FMP)

QUESTALPHA GmbH & Co. KG, Eschenburg (BVMED)

R-Dental Dentalerzeugnisse GmbH, Hamburg (LSN)

R&D Consulting GmbH & Co. KG, Klagenfurt (FMP)

R&D Technology, Monswiller (Frankreich) (VDMA)

R&R Med GmbH, Nürnberg (FMP, MV)

RACKETTE Patentanwälte PartG mbB, Freiburg (MM)

RADIMED, Bochum (SPECTARIS)

RAFI Eltec GmbH, Überlingen (MM)

Ramme Drehteile GmbH, Königsbach-Stein (MM)

Rampf Production Systems GmbH & Co. KG, Zimmern ob Rottweil (MM)

RAPA Rausch & Pausch GmbH, Selb (FMP)

Raphael Frasch GmbH, Erlangen-Tennenlohe (MV)

RAS AG, Regensburg (FMP)

RAUMEDIC AG, Helmbrechts (BVMED, FMP, MM, MV)

Rauschert Heinersdorf-oPressig GmbH, Pressig (MM)

Raylytic GmbH, Leipzig (BVMED, SPECTARIS)

Rayner Surgical GmbH, Berlin (BVMED)

Rechtsanwälte Preuß & Bürvenich Partnerschaft mbB, Plochingen (FMP)

recusana GmbH, Stuttgart (BVMED)

REGER Medizintechnik GmbH, Villingendorf (MM)

Regionalverband Schwarzwald-Baar-Heuberg, Villingen-Schwenningen (MM)

rego X-Ray GmbH, Augsburg (FMP)

reha team Nordbayern Gesundheitstechnik GmbH, Bayreuth (MV)

Rehaforum Medical GmbH, Elmshorn (LSN)

rehaVital Gesundheitsservice GmbH, Hamburg (BVMED)

Rehder / Partner GmbH, Hamburg (LSN)

Reinhardt Microtech GmbH, Ulm (MTSW)

Relyon Plasma GmbH, Regensburg (FMP)

REMARK GmbH, Oberschleißheim bei München (FMP)

Renishaw GmbH, Pliezhausen (VDMA)

Repado Ltd, Athens (FMP)

reputation-engineering, Wörth (FMP)

ResMed Deutschland GmbH, Bremen (SPECTARIS)

Resorba Medical GmbH, Nürnberg (FMP, MV)

ReWalk Robotics GmbH, Berlin (SPECTARIS)

Rheinisch-Bergisches TechnologieZentrum GmbH, Bergisch Gladbach (IVAM)

RI Innovation GmbH, Hürth (FMP)

Richard Wolf GmbH, Knittlingen (SPECTARIS)

Richardson Electronics GmbH, Donaueschingen (MM)

Ritex GmbH, Bielefeld (BVMED)

Ritter GmbH, Schwabmünchen (FMP)

Ritzi Industriedrucktechnik GmbH, Trossingen (MM)

rk instrumente GmbH, Tuttlingen (MM)

RMT GmbH & Co. KG, Hamburg (LSN)

Roche Diagnostics Deutschland GmbH Diabetes Care, DD-IH, Mannheim (FMP)

Roche Diagnostics GmbH Entwicklung Mechanik, Mannheim (FMP)

Roche Diagnostics GmbH, Mannheim (FMP, MTSW)

Roche Diagnostics GmbH, Penzberg (FMP)

Rodenstock GmbH, München (FMP)

Rodriguez GmbH, Eschweiler (VDMA) Rölke Pharma GmbH, Hamburg (LSN)

röntgen bender GmbH & Co. KG, Siek (LSN)

Rösler Oberflächentechnik GmbH, Untermerzbach (VDMA) ROFIN-SINAR Laser GmbH, Bergkirchen (VDMA)

ROHDE KG, Röttenbach (MV)

Roland Stangl Innovations, Moosburg (FMP, IVAM)

RoodMicrotec GmbH Stuttgart (MTSW)

rose plastic medical packaging GmbH, Hergensweiler (MM)

RoweMed AG, Parchim (VDMA)

Rowiak GmbH, Hannover (FMP, SPECTARIS)

Royal Danish Consulate Innovation Center Denmark, München (FMP)

RSG Automation Technics GmbH & Co. KG, Bietigheim-Bissingen (VDMA)

RSG Bad Kissingen, Rhön-Saale Gründer-und Innovationszentrum

GmbH & Co. KG, Bad Kissingen (FMP)

RSR Reha-Service-Ring GmbH, Hamburg (BVMED)

RTA Reinraumtechnik Alb GmbH, Trochtelfingen (MM)

RUDOLF Medical GmbH + Co. KG, Fridingen an der Donau (MM)

Rudolf Michael GmbH, Eppingen (MM)

Rudolf Riester GmbH, Jungingen (SPECTARIS)

Rudolf Storz GmbH, Emmingen-Liptingen (MM)

ruf-Konstruktionsbüro und CNC-Frästechnik, Villingen-Schwenningen (MM)

Ruhr-Universität Bochum, Bochum (IVAM)

Rupp + Hubrach Optik GmbH, Bamberg (SPECTARIS)

RWTH Aachen Institut für Textiltechnik (ITA), Aachen (FMP)

S-Techs GmbH, Hamburg (LSN)

S.I.E SOLUTIONS System Industrie Electronic Deutschland GmbH, Landshut (FMP)

S.I.E SOLUTIONS System Industrie Electronic GmbH, Lustenau (FMP)

S.I.M.E.O.N. Medical GmbH & Co. KG, Tuttlingen (MM)

S&V Technologies GmbH, Hennigsdorf (BVMED)

Sachtleben GmbH, Hamburg (LSN)

Sachverständigenbüro IT, Nürnberg (FMP)

Sachverständigenbüro Kapitza, Germering (FMP)

SAE GmbH, Weng (VDMA)

SafetyKon, Freiburg (MM)

Saitama City Foundation for Business Creation, Chuou-ku,

Saitama City (FMP)

Salcon, Heidelberg (IVAM)

Sanavita Pharmaceuticals GmbH, Hamburg (BVMED)

SANDER Chemisch-Pharmazeutische Fabrik GmbH, Berlin (BVMED)

Sandvik Materials Technology Deutschland GmbH, Mörfelden-Walldorf (IVAM)

Sandvik Tooling Deutschland GmbH, Düsseldorf (VDMA)

Sanemus AG, München (FMP)

Sangel Systemtechnik GmbH, Bielefeld (VDMA)

sangro medical service GmbH, Erkrath-Unterfeldhaus (BVMED)

SANIMED GmbH, Ibbenbüren (BVMED)

Sanitätshaus Aktuell AG, Vettelschoß (BVMED)

Sanitätshaus Kurda GmbH, Kiel (LSN)

Sanitätshaus Müller Betten GmbH & Co. KG, Engelskirchen (BVMED)

Sanitätshaus Urban & Kemmler GmbH, Weiden (FMP)

Sanitop GmbH, Mannheim (BVMED)

SANMEDICA GmbH Medicare · Logistics · Consulting, Pinneberg (LSN)

Santen GmbH, München (BVMED)

Sapio Life GmbH & Co. KG, Homburg (SPECTARIS)

sapiotec GmbH, Würzburg (MV)

Sartorius Lab Instruments GmbH & Co. KG, Göttingen (SPECTARIS)

SAS hagmann GmbH & Co. KG, Horb a.N. (MM)

Sasse Elektronik GmbH, Schwabach (FMP, MV)

Savuna GmbH, Augsburg (FMP)

SBS-Feintechnik GmbH & Co. KG, Schonach (MM)

SCC Scientific Consulting Company GmbH, Bad Kreuznach (MTSW)

Schaeffler Technologies AG & Co. KG, Homburg (VDMA)

Scheidegg GmbH Systemtechnik, Bermatingen-Ahausen (MM)

Schellenberger Bürstenfabrik GmbH, Bechhofen (FMP)

Schellinger Zerspantechnik GmbH, Sipplingen (MM)

SCHEMA Gruppe, Nürnberg (MV) SCHILLER Automation GmbH & Co. KG. Sonnenbühl (MM)

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Schlösser & Co. Marketing GmbH, Bayreuth (FMP, MV)

Schlumbohm GmbH & Co. KG, Brokstedt (LSN)

Schlumbohm Medizin-Labor-Technologie GmbH, Hamburg (LSN) Schmidt+Haensch GmbH & Co., Berlin (SPECTARIS)

SCHMITZ u. Söhne GmbH & Co.KG, Wickede (SPECTARIS)

SCHNEEBERGER GMBH, Höfen an der Enz (VDMA)

Schneider Schreibgeräte GmbH, Schramberg-Tennenbronn (MM)

SCHÖLLY FIBEROPTIC GMBH, Denzlingen (MM)

Schott & Meissner Maschinen und Anlagen GmbH, Blaufelden (VDMA)

SCHOTT AG. Mainz (FMP)

Schülke & Mayr GmbH, Norderstedt (BVMED)

Schüssler Technik GmbH & Co. KG, Pforzheim (VDMA)

Schütt & Grundei Orthopädietechnik GmbH, Lübeck (LSN)

Schütt und Jahn GmbH, Handewitt Weding (LSN)

SCHUNK GmbH & Co. KG, Lauffen (VDMA)

Schupp GmbH & Co. KG. Dornstetten (MM)

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Schwan - Cosmetics Produktionstechnik GmbH & Co. KG, Heroldsberg (VDMA)

Schwanog Siegfried Güntert GmbH, Villingen-Schwenningen (VDMA)

SCHWIND eye-tech-solutions GmbH, Kleinostheim (FMP, SPECTARIS)

SCS Germany GmbH, Pliezhausen (MTSW)

SDL Multilingual Services GmbH & Co. KG, Stuttgart (VDMA)

seca gmbh & co. Kg, Hamburg (LSN, SPECTARIS, VDMA)

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Segeberger Kliniken GmbH, Bad Segeberg (LSN)

Sekisui Diagnostics GmbH, Darmstadt (FMP)

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SEM-Plastomed GmbH, Obererbach (BVMED)

SEMASU GmbH, Ismaning (FMP)

Semeda GmbH, Bad Bodenteich (SPECTARIS)

senetics healthcare group GmbH & Co. KG, Ansbach (FMP, MV)

SENTECH Gesellschaft für Sensortechnik GmbH, Krailing (IVAM)

Sentiero Logistics Ltd, Hamburg (LSN)

sepp.med gmbh, Röttenbach (MM, MV)

SERAG-WIESSNER GmbH & Co. KG, Naila (BVMED)

servoprax GmbH, Wesel (BVMED)

SES Systemtechnik & uv-electronic GmbH, Balgheim (MM)

sfm medical devices GmbH, Wächtersbach (BVMED, MM)

SGA GmbH, Geisingen (MM)

SGS Germany GmbH, München (FMP)

SHL AG. Böttingen (MM)

SHS Gesellschaft für Beteiligungsmanagement mbH, Tübingen (FMP)

SI-Bone Germany GmbH, Mannheim

SICK AG, Waldkirch (MTSW)

SICK STEGMANN GmbH, Donaueschingen (MM)

Siemens AG Healthcare Sector, Forchheim (FMP)

Siemens AG RD Hanse, Hamburg (LSN)

Siemens AG, Erlangen (FMP, VDMA)

Siemens Healthcare GmbH, Brussels (FMP, LSN)

Siemens Healthcare GmbH, Erlangen (FMP, LSN)

Siemens Healthcare GmbH, Forchheim (FMP, LSN)

Siemens Healthcare GmbH, Hamburg (FMP, LSN)

Siemens Healthcare GmbH, Kemnath (FMP, LSN)

Siemens Healthcare GmbH, München (FMP, LSN) Siemens Healthcare GmbH, Nürnberg (FMP, LSN)

Siemens Healthineers GmbH, Erlangen (MV)

Sigma Dental Systems - Emasdi GmbH, Handewitt (LSN)

SIGMA Elektro GmbH, Neustadt (FMP)

SIGMA Elektro Ltd., Kowloon Hong Kong (FMP)

SIGNUS Medizintechnik GmbH, Alzenau (BVMED, MM)

Sigrid Triebfürst, medtech-seminare & coaching, Erlangen (FMP)

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SIMEX Medizintechnik GmbH, Deisslingen-Lauffen (MM)

SIMFO Spezielle Immunologie Forschung + Entwicklung GmbH,

Bayreuth, Bayreuth (FMP)

Simon Hegele GmbH, Karlsruhe (MV)

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SIMON Systemtechnik GmbH, Ulm-Lehr (MM)

SIMPEX-OBJEKT Klaus-Uwe Hintz e.K., Wahlstedt (LSN)

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Sioux Technologies GmbH (4plus GmbH), Erlangen (FMP, MV)

Sirtex Medical Europe GmbH, Bonn (BVMED)

SITEC Industrietechnologie, Chemnitz (VDMA)

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SmartMembranes GmbH, Halle (Saale) (IVAM)

SMB Schnekenburger GmbH, Bad Dürrheim-Öfingen (MM)

SMC Deutschland GmbH, Egelsbach (VDMA)

Smith & Nephew GmbH, Marl (BVMED, LSN)

Smiths Medical Deutschland GmbH, Grasbrunn (BVMED)

SMS group GmbH, Düsseldorf (VDMA)

SOEHNLE Industrial Solutions GmbH, Backnang (VDMA)

Söring GmbH, Quickborn (LSN, SPECTARIS)

softgate GmbH, Erlangen (FMP, MV)

softwareproduktiv Schwarzwald GmbH, St. Georgen im Schwarzwald (MM)

SOHARD Software GmbH, Fürth (MV)

Solectrix GmbH, Fürth (FMP, MV)

Solidpro Informationssysteme GmbH, Langenau (MM)

Solnovis GmbH, Eggolsheim (FMP, MV)

SomnoMed® Germany GmbH, Zellingen (SPECTARIS)

Sonic Technology AG, Stuttgart (MM)

Sonnenberg Harrison, Partnerschaft von Patent- und Rechtsanwälten

mbB. München (IVAM)

Sonormed GmbH, Hamburg (LSN)

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SONOTEC Ultraschallsensorik Halle GmbH, Halle (VDMA)

Sonovum AG, Leipzig (SPECTARIS)

Sonovum GmbH, Leipzig (FMP)

Sozialstiftung Bamberg, Bamberg (MV)

Sparkasse Forchheim, Forchheim (MV)

SPECTARIS, Berlin (IVAM)

SpeedCareMineral GmbH, Neubrandenburg (LSN)

speziMED GmbH, Radeberg (BVMED)

Spiegelberg GmbH & Co. KG, Hamburg (LSN)

Spirit Link GmbH., Erlangen (FMP)

Spreitzer GmbH & Co. KG, Gosheim (MM) SPRING Technologies GmbH, Wetzlar (VDMA)

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Stadt Ansbach, Ansbach (MV)

Stadt Bamberg, Bamberg(MV)

Stadt Erlangen, Erlangen (FMP, MV) Stadt Forchheim, Forchheim (MV)

Stadt Fürth, Amt für Wirtschaft und Stadtentwicklung, Fürth (FMP)

Stadt Nürnberg NürnbergStift, Nürnberg (FMP)

Stadt Tuttlingen, Tuttlingen (MM)

Stadt Villingen-Schwenningen, Villingen-Schwenningen (MM)

Stadt- und Kreissparkasse Erlangen, Erlangen (MV)

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Stäubli Tec-Systems GmbH, Bayreuth (VDMA)

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Star-Ream Pharma Import und Export Großhandel UG, Hamburg (LSN)

Starkey Laboratories (Germany) GmbH, Hamburg (LSN)

Starrag GmbH, Chemnitz (VDMA)

steco-system-technik GmbH & Co. KG, Hamburg (LSN)

STEIN Automation GmbH & Co. KG, Villingen-Schwenningen (MM, VDMA)

Steinbeis 2i GmbH, Karlsruhe (MTSW)

Steinbeis GmbH & Co. KG für Technologietransfer, Stuttgart (MTSW)

Steinbeis-Transferzentrum Infothek, Villingen-Schwenningen (MM)

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steripac GmbH, Calw-Altburg (MM)

Sterman Technische Systeme GmbH, St. Georgen (MM)

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steute Technologies GmbH & Co. KG, Löhne (VDMA)

Stiegelmeyer GmbH & Co. KG, Herford (SPECTARIS)

Stiftung Endoprothetik, Hamburg (LSN)

Stirnal Medizin-Elektronik GmbH, Ammersbek (LSN)

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symmedia GmbH, Bielefeld (VDMA)

synlab Weiden Medizinisches Versorgungszentrum für Laboratoriumsmedizin und Mikrobiologie, Weiden (FMP)

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Sysmex Europe GmbH, Norderstedt (LSN)

Systam SAS France | Systam DE - Verbindungsbüro, Saarbrücken (BVMED) Systemtechnik LEBER GmbH & Co. KG, Schwaig (FMP, MV)

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tantum AG, Neumünster (LSN)

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tbko - thomas bengel konstruktion + prototypen, Meßstetten (MM)

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TDK-Micronas GmbH, Freiburg (MTSW)

TE Connectivity Sensors Germany GmbH, Dortmund (IVAM)

teamtechnik Maschinen und Anlagen GmbH, Freiberg am Neckar (MTSW)

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Techniker Krankenkasse Landesvertretung Bayern, München (FMP)

Techniker Krankenkasse, Hamburg (FMP)

Technische Hochschule Rosenheim Fakultät für Angewandte Gesund-

heits- und~Sozialwissenschaften, Rosenheim (FMP)

Technische Sachbearbeitung Industrial - Engineering, Schwerin (FMP)

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Technische Universität Hamburg Harburg (TUHH), Hamburg (LSN)

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Technische Universität München Fakultät für Maschinenwesen Lehrstuhl für Mikro- und Medizingerätetechnik, Garching (FMP)

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Teleon Surgical Vertriebs GmbH, Berlin (BVMED)

TELEPAXX Medical Data GmbH, Büchenbach (MV)

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temicon GmbH, Dortmund (IVAM)

TentaMedix GmbH, Karlsruhe (MM)

TePe D-A-CH GmbH, Hamburg (LSN)

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TesT GmbH, Erkrath (VDMA)

Testo SE & Co. KGaA, Titisee-Neustadt (MTSW)

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Textilia Stahlwaren-Manufaktur GmbH & Co. KG, Solingen (SPECTARIS)

TGE-gTrägergesellschaft mbH, Neumarkt (MV)

THALES DIS CPL Deutschland GmbH, München (FMP)

The ROHO Group | ROHO International, Inc., Hasselt (BVMED)

Thieme Compliance GmbH, Erlangen (FMP)

thingbetter UG, Hamburg (LSN)

THM-Medizintechnik, Stockelsdorf (LSN)

Thomas Hilfen für Körperbehinderte GmbH & Co. Medico KG,

Bremervörde (BVMED)

Thomas Magnete GmbH, Herdorf (VDMA)

Thomas Maier Coaching und Beratung, München (FMP)

THORLABS GmbH, Lübeck (LSN)

thyssenKrupp Elevator Innovation and Operation AG, Essen (MM)

tk pharma trade Handelsgesellschaft mbH, Hasbergen (BVMED)

TMH Medizinhandel GmbH & Co. KG | Medizinisch Pharmazeutischer Großhandel, Duisburg (BVMED)

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toolcraft AG, Georgensmünd (VDMA)

TQ-Systems GmbH, Seefeld (SPECTARIS)

TRACOE medical GmbH, Nieder-Olm (BVMED)

Tradex-Services GmbH, Münsing

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Transferplattform Industrie 4.0 Steinbeis-Innovationszentrum gGmbH, Aalen (MTSW)

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Trials24 GmbH, München (FMP)

TRiCares GmbH, Aschheim (BVMED)

tricumed Medizintechnik GmbH, Kiel (LSN)

TRIGA-S e. K. Scientific Support, Habach (FMP)

TRIOPTICS GmbH, Wedel (LSN)

TriOptoTec GmbH, Regensburg (FMP)

TriSolution, Villingen-Schwenningen (MM)

Trivadis Germany GmbH, Freiburg (MTSW, MM)

TRIZAX The 3D-Channel, Erlangen (MV)

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TRUMPF Laser- und Systemtechnik GmbH, Ditzingen (IVAM, VDMA)

TRUMPF Schweiz AG Lasertechnik, Grüsch (Schweiz) (VDMA)

TTI GmbH - TGU Light Pulse, Stuttgart (VDMA)

TU Kaiserslautern FBK, Kaiserslautern (VDMA)

TU München, Lehrstuhl für Mikrotechnik und Medizingerätetechnik, München (VDMA)

TÜV Rheinland LGA Products GmbH, Nürnberg (MV)

TÜV SÜD Akademie GmbH Training Center Nürnberg, Nürnberg (FMP)

TÜV SÜD Akademie GmbH, München (FMP, MV)

TÜV SÜD Product Service GmbH, München (FMP)

TÜV Technische Überwachung Hessen GmbH, Darmstadt (FMP)

TURCK duotec GmbH, Halver (FMP, IVAM)

TURCK duotec S.A., Delémont (MM)

Tutogen Medical GmbH (RTI Surgical), Neunkirchen am Brand (BVMED, MV)

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UB-Software Entwicklungs- und Vertriebs- GmbH, Spaichingen (MM) UCM AG. Rheineck (MM)

UG Systems GmbH & Co. KG, Bamberg (MV)

UG-MaS Unternehmung Gesundheit, Management & Service GmbH, Nürnberg (FMP)

UGOM GmbH & Co. KG, Amberg (FMP)

Uhrenfabrik Junghans GmbH & Co.KG, Schramberg (MM)

UL International Germany GmbH, Neu-Isenburg (MM)

ulrich GmbH & Co. KG, Ulm (BVMED)

United Monolithic Semiconductors GmbH, Ulm (MTSW)

UniTransferKlinik Lübeck, Lübeck (FMP, LSN, SPECTARIS)

UNITY AG, Büren (VDMA)

Universität Augsburg Forschungsstelle Medizinprodukterecht, Augsburg (FMP)

Universität Bayreuth - LS Wirtschaftsinformatik, Bayreuth (MV)

Universität Erlangen-Nürnberg – FAU Betriebswirtschaftliches Institut LS für Gesundheitsmanagement, Nürnberg (FMP)

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Universität Erlangen-Nürnberg – FAU LS für Werkstoffwissenschaften (Biomaterialien), Erlangen (FMP)

Universität Erlangen-Nürnberg – FAU Technische Fakultät LS Technische Elektronik. Erlangen (FMP)

Universität Erlangen-Nürnberg LS für Strömungsmechanik, Erlangen (FMP)
Universität Erlangen-Nürnberg Max Schaldach-Stiftungsprofessur für
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Universität Erlangen-Nürnberg Zentralinstitut für Medizintechnik, Erlangen (FMP)

Universität Hamburg, Hamburg (LSN)

Universität Regensburg Institut für Medizinische Mikrobiologie und Hygiene, Regensburg (FMP)

Universität Regensburg Medizinische Fakultät, Regensburg (FMP)

Universität Siegen, Siegen (IVAM)

Universität Stuttgart, Stuttgart (MTSW)

Universität Ulm Institut für Diabetes-Technologie, Ulm (FMP)

Universität Ulm, Ulm (MTSW)

Universität zu Lübeck, Lübeck (LSN)

Universitätsklinikum Erlangen, Erlangen (MV)

Universitätsklinikum Erlangen Anästhesiologische Klinik, Erlangen (FMP)

Universitätsklinikum Erlangen Chirurgische Klinik, Erlangen (FMP)

Universitätsklinikum Erlangen Hals-Nasen-Ohren-Klinik -Kopf- und Halschirurgie, Erlangen (FMP)

Universitätsklinikum Erlangen Hautklinik, Erlangen (FMP)

Universitätsklinikum Erlangen Klinik und Poliklinik für Mund-Kiefer-Gesichtschirurgie, Erlangen (FMP)

Universitätsklinikum Erlangen LS für Orthopädie und orthopädische Chirurgie, Erlangen (FMP)

Universitätsklinikum Erlangen Molekulare Neurologie (ForNeuroCell), Erlangen (FMP)

Universitätsklinikum Erlangen Strahlenklinik, Erlangen (FMP)

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Universitätsklinikum Regensburg Klinik und Poliklinik für Innere Medizin II, Regensburg (FMP)

Universitätsklinikum Regensburg Klinik und Poliklinik für Innere Medizin, Regensburg (FMP)

Universitätsklinikum Regensburg Klinik und Poliklinik für Neurologie im Bezirksklinikum, Regensburg (FMP)

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