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enterprise europe



Business Support on Your Doorstep

NRW.Europa

Hidden Champions from North Rhine- Westphalia



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Editorial.

With 600 organisations in 51 countries, the Enterprise Europe Network is the largest innovation consulting and technology transfer network in the world for SMEs. Each year, thousands enterprises take advantage of the Network's services, which are mostly free of charge. One of the Network's most important goals is to help its clients to establish and implement transnational partnerships. In 2011 alone, over 1.600 such cooperation agreements were documented.

This brochure portrays 26 innovative and internationally active enterprises from North Rhine-Westphalia, one of Germany's strongest economic regions. Many of them play a leading role in their respective markets and technological fields – in the region, in Germany, in Europe and increasingly at global level too. Some of them are "hidden champions", partly unknown world market leaders in specific technology and market segments. What they have in common is that they display a strong commitment to technology and innovation and are receptive towards new international partners.

All the enterprises presented here belong to ZENIT's circle of shareholders and clients. For over 25 years, ZENIT has been a member of European information and advice networks (Euro Info Centre (EIC), Innovation Relay Centre (IRC) and today Enterprise Europe Network) and consequently has extensive experience in providing consulting services on European topics and in the mediation of cooperation partners.

Anyone interested in potential partnerships can contact their local Enterprise Europe Network office (<http://ec.europa.eu/enterprise-europe-network>) or ZENIT, which as "NRW.Europa" is the Network node for North Rhine-Westphalia, together with the NRW.BANK, and ready to help broker new contacts. Incidentally, the regional Network organizations have the facilities to identify interesting cooperation partners abroad and bring these together, for example using a technology database in which the partner search profiles of about 13.000 enterprises are stored or in the framework of the some 1.000 brokerage events which the Network has staged since 2008. Help is also available for defining joint projects or procuring public funding.

We wish you interesting reading and hope you enjoy launching new partnerships.



Joanna Drake
Director and Deputy SME Envoy, European Commission



Peter Wolfmeyer
Managing Director ZENIT GmbH



Where to find help locally

The Enterprise Europe Network.

The Enterprise Europe Network is the largest European business support and innovation network providing integrated high quality services for the benefit of SMEs. The network's mission is to provide integrated information, business co-operation, innovation and technology transfer services in support of small businesses and innovative SMEs.

One of the network's core activities is informing enterprises about EU legislation, programmes and funding opportunities as well as providing feedback from SMEs to the Commission to ensure that future legislation responds to SME needs. Network members have expertise in areas of specific interest to companies such as: public procurement, business cooperation, financing, innovation, technology transfer, market research and Intellectual Property Rights. Network members also help companies to apply for EU research projects and fulfil administrative formalities. They have direct access to the European Commission and are supported by dedicated staff in the Executive Agency for Competitiveness and Innovation in Brussels, assisting them in answering the most complex questions.

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Information is also provided to companies through awareness-raising activities (participation in fairs, organisation of seminars, lectures, workshops...) and a range of publications offered in local languages (guides, newsletters, websites...).

The Enterprise Europe Network also supports innovation by providing brokerage services for technology and knowledge transfer. It also supports partnership-building



activities between all kinds of innovation actors and it is engaged in disseminating information related to innovation issues and in exploiting research-based technologies. They operate a partnership database with more than 13.000 offers and request for cooperation.

■ „The Enterprise Europe Network is a well established business support with 600 experienced organisations in 51 countries. It offers help especially to SMEs who are on the lookout for commercial partners, for technology transfer business or an FP7-involvement.“

Joanna Drake, Director and Deputy SME Envoy, European Commission

Regardless of what stage of a business cycle a company is in or what level of familiarity it has with European affairs, the Enterprise Europe Network can help. It helps companies to take advantage of business opportunities and can expose them to European and international markets through its partners in 51 countries. The Enterprise Europe network has nearly 600 offices spread across Europe and in Third Countries. These include all EU Member States, Candidate Countries, Associated Countries to the Competitiveness and Innovation Programme, members of the European Economic Area, and major economic areas such as China, Russia, South-Korea, Mexico and the US.

Further information:

<http://ec.europa.eu/enterprise-europe-network>

To find the closest branch, both across the EU and beyond:
<http://www.enterprise-europe-network.ec.europa.eu/about/branches>

Source: European Union Support. Programmes for SMEs. An overview of the main funding opportunities available to European SMEs. January 2012

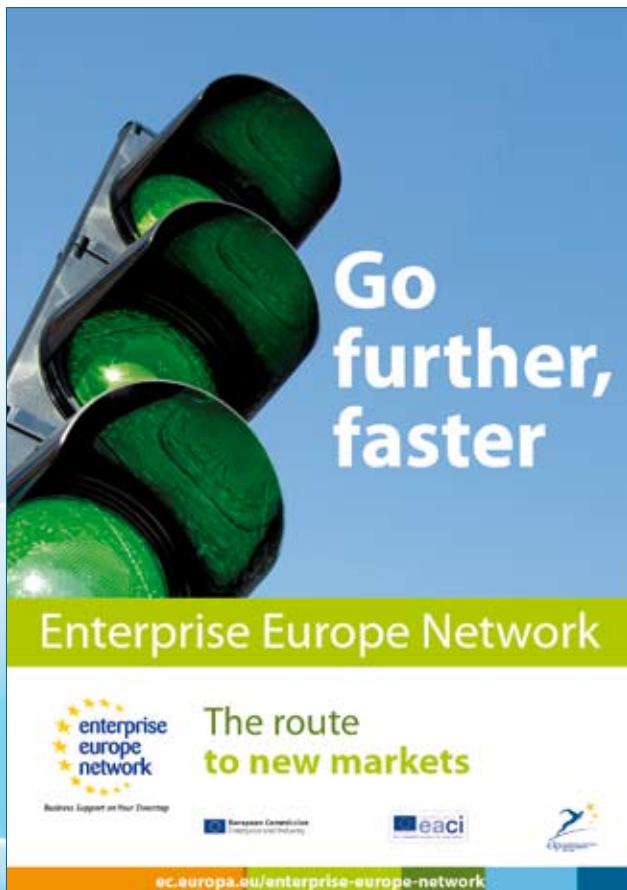


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Business Support on Your Doorstep

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NRW.Europa

Under the name NRW.Europa, ZENIT GmbH and the NRW.BANK are together offering the best possible support in the area of transnational European business. Our service package encompasses comprehensive advice, for example for internationalisation and innovation projects, in the search for national and international business partners as well as in applications for public funding.

Our services are available to enterprises, organisations close to the business and research communities, as well as universities in North Rhine-Westphalia. Our top priority is small and medium-sized enterprises (SMEs).

www.nrw-europa.de

Bio Circle. **Innovative products for surface technology.**

At the heart of East Westphalia-Lippe, in the town of Gütersloh, lie the headquarters of Bio-Circle Surface Technology GmbH. For 25 years, this chemistry and biotechnology company has been manufacturing, developing and selling innovative chemical/technical products for surface treatment.

Environmentally compatible products for cleaning, protection, lubrication and welding, as well as complete cleaning systems, are manufactured and marketed under the names of bio-chem and BIO-CIRCLE.

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Solvents can be substituted in many applications with the aqueous bio-chem products. If technically possible, they are manufactured from reproducible raw materials, are largely VOC-free and partly certified by the NSF. The company is represented worldwide through its subsidiaries in Austria, Switzerland, Brazil, Canada, Poland, Czechia, China and Thailand.

History

Starting point was the idea of developing alternative products to those containing chlorinated hydrocarbons used in the metal industry. As a two-man firm, the engineers Ulrich and Manfred Berens set up CB Chemie und Biotechnologie in 1985. The first product range

comprised CFC-free maintenance products which were tested and used in the region's metal industry, as well as phosphate-free aqueous cleaners. The introduction of bio-chem as the trade name for all the company's products was followed by first products for the new protection, lubrication, welding and ice-free product segments. The product range was rounded off by the cleaning product line for surface treatment.

In 2010, the company was renamed and has since operated under the name of Bio-Circle Surface Technology GmbH. Against the background of its business strategy, which has an international focus, the change of name made it possible to channel and strengthen its know-how at global level too.

Over the years, the firm has developed into an enterprise with around 120 employees which operates at international level. Subsidiaries and production facilities were set up in Europe and many other parts of the globe. In addition, the company's consistent presence at national and international exhibitions stimulates an innovative reaction to ideas and markets.

Aware that it must bear responsibility for the environment, the company is actively involved in a number of environmental projects. Against the background of ever stronger globalization, the firm's environmental management system was certified in accordance with the ISO 14.001 standard valid worldwide and regularly recertified up until today.



■ *"Cooperation partnerships mean that Bio-Circle Surface Technology GmbH can expand its sales and distribution network with limited investment in many places at the same time"*

Martin Feindt, Vice President Export



Bio-Circle Surface Technology GmbH

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D - 33334 Gütersloh
Telephone: +49 - 5241 - 9443 0
Email: service@bio-circle.de
Internet: www.bio-circle.de

Year founded: 1985

No. of employees: 120
Foreign share of turnover: 43 %

Presence in foreign markets: Subsidiaries in Switzerland, Austria, Canada, Brazil, Poland, Czechia, China and Thailand. Product sales worldwide.

Awards (optional): German Material Efficiency Prize, NRW Efficiency Prize, Innovation Prize of SME Initiative, b2fair Award, Office & Environment Prize, "Familie gewinnt – The family wins"

Member of Netzwerk ZENIT e.V.: Since 2010

Product innovation

Because research and development are the basis for future-oriented products, the Development Department works closely together with a number of universities. At the centre stands the guiding principle of the firm's philosophy: "Holistic thinking and sustainable action". The result is convincing more and more customers worldwide who are seeking efficient, environmentally friendly and affordable solutions. "The key factor to our success is the fact that we are able to utilize the innovations which we have developed in the framework of basic research in applications engineering, establish them as the industrial standard and then market them as well", says Ulrich Berens, Chairman of the Supervisory Board. The future will see more such marketable innovations. And the firm is optimistic that it can continue to conquer the market both at national and international level.

Business field: Chemistry and biotechnology (surface technology)

Clients: Industry

Special expertise: Using the innovations we have developed in the framework of basic research in the field of applications engineering, establishing them as the industrial standard and marketing them.

Interested at international level in:

- Partners for research projects
- Sales and distribution partnerships
- Technology cooperation

Outlook: "For us, sustainability means taking on responsibility. For our activities in business and society as well as for all environmental issues", Ulrich Berens, Chairman of the Supervisory Board

Bomafa. **Cutting-edge engineering from the Ruhr.**

The taps in the kitchen and bathroom - also a type of valve - are familiar to every child. What BOMAFA has to offer is however on quite a different scale. For 90 years it has been supplying large control valves for power plants and industrial processes.



This traditional Bochum firm has made a name for itself above all as a leading manufacturer of high-pressure bypass systems. The purpose of these special valves is to divert the steam in a power plant around the turbine if necessary and at the same time to regulate temperature and pressure. All valves are individually adapted to the specifications of the site in question, in order to guarantee that processes are efficient and safe. Apart from maximum safety, easy maintenance plays a major role, since every minute of plant downtime costs money and servicing must take place quickly and safely under difficult conditions.

The team in Bochum see themselves in the first instance as engineering partners for complete and sophisticated solutions. They already have in mind from early on the most important plant parameters, because now as before they occupy a niche with their valves which demands a high level of technical expertise and flexible solutions. Today's product offer is the result of skills gained over decades and of which no-one would have thought back when the firm was founded in 1919. It all namely began

with the manufacture and sale of mining equipment. That one day more turnover would be generated with exports than in the home market was presumably inconceivable.

Internationalization

Offering today's know-how to a global market too is a task the some 100 employees of the BOMAFA Group set themselves each day anew, as each market has its own rules. What seems promising in China might amount to nothing in South America.

One of the reasons for this is cultural differences. Friedrich Appelberg, Managing Director of the firm in the fourth generation, understands the great importance of being open to foreign cultures in order to be successful. A few years ago, he went to China himself with his family for a year and today he still regularly spends at least six weeks a year there. The reward: BOMAFA is perceived in the "Middle Kingdom" as particularly authentic. "The Chinese appreciate "Made in Germany" quality and our SME structure," says Friedrich Appelberg. Being close to the customer is a powerful argument which is convincing at international level too.

■ *"If you want to be successful abroad, you must above all be prepared to accept different cultures."*

*Friedrich Appelberg,
Managing Director of
BOMAFA Armaturen
GmbH*



Success was therefore forthcoming: In 2010 and with almost eleven million Euros, BOMAFA achieved the best turnover in the firm's history. In addition to new equipment and machines, the workforce was increased by 30 percent. The fact that 75 percent of turnover is generated abroad contributes significantly to this development.

Sectoral commitment

In order to attract qualified personnel, BOMAFA also places strong emphasis on the regional market. As a founding member of Armaturenkompetenz Ruhr e.V., a local business network, it is actively involved, together with four other valve manufacturers, in the promotion and presentation of valve technology from the Ruhr. The core of its support is a one-year student scholarship which aims to inspire young engineers towards the valve sector. This commitment meant new ground for BOMAFA. "But via our regional network, new opportunities open up which benefit not just customers and partners but ultimately the whole region."



BOMAFA Armaturen GmbH

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Email: info@bomafa.de
Internet: www.bomafa.de

Year founded: 1919
No. of employees: 102
Turnover 2011: 12 million
Foreign share of turnover: 75 %

Presence in foreign markets: China, Brazil, India

Patents: Desuperheating with atomization

Awards: Winner of the "profitplus Growth Competition" of Bochum Business Development Office in 2009

Member of Netzwerk ZENIT e.V.: since 2009

Business field: Steam control valves for power plants and industrial processes

Clients: International plant construction firms and operators, such as Evonik, RWE, E.On, BASF, Siemens, ThyssenKrupp, BHEL for example

Special expertise: Worldwide flexible service, customized valve design

Interested at international level in:
Manufacturing partnerships
Distribution partnerships
Technology partnerships

Outlook: We are currently observing vast developments in the energy sector in the emerging BRIC countries. Power plants and other facilities are being planned and built in record time. In order to participate in this growth, we must develop our own strategy for each market. We must use our resources in such a way that we can gain a foothold everywhere, but without overstressing ourselves and going beyond our limitations. Cooperation with local partners is BOMAFA's preferred choice". Friedrich Appelberg

Bültmann. A major presence in a small global market.

In the machine and plant construction sector, Bültmann GmbH in Neuenrade is market leader in the production fields of drawing, straightening and peeling, and supplies customers worldwide in the semi-finished products industry.

The product range of the 120-strong company from the Sauerland covers the full production chain for tube, bar and profile manufacture from almost all types of metal. This includes drawing, peeling and straightening machines, as well as machines for upstream and downstream processing stages. Bültmann not only supplies individual machines, but also complete turnkey production lines and plants. These are characterized by a high level of automation and in this way guarantee low manufacturing costs and constantly good product quality. The firm was founded in 1972 by Rudolf Bültmann, who developed and built innovative drawing machines for the production of tubes, bars and profiles. A product offer which was highly welcomed by the market at a time when, for example, refills for ballpoint pens were still made of little metal tubes.

Research activities

Whilst for about 30 years it was customer contracts which were the driving force behind the firm's development work, today Bültmann is also active itself in the area of research and development. Its first public-funded R&D project was launched in 2005 under the umbrella of the EU's Sixth Framework Programme for Research. The objective was the development of a new drive technology based on magnetic fields. Also innovative and successful was a project funded by the Deutsche Bundesstiftung Umwelt DBU (German Federal Foundation for the Environment). For the first application worldwide of high-temperature superconductor technology in an industrial manufacturing process, which leads to high energy savings in aluminium

processing, Bültmann, together with its partner Zenergy Power GmbH, was awarded numerous environmental prizes.

Internationalization

The innovations introduced in the 1970s in the area of drawing machines proved to be a door-opener to a major and renowned German firm. This global player integrated Bültmann machines from the Sauerland into its product portfolio and sold them worldwide. Through the cooperation with clients which was necessary for this, international contacts evolved which still exist today. What also made a contribution was the fact that the circle of European tube manufacturers is relatively small and has always been closely networked. In addition, Rudolf Bültmann pursued a tenacious and consistent sales strategy with his international clients. The company has been run by the second generation since 1997 and today sells its machines and plants across the entire globe. Target customers include around 200 manufacturers, both private companies and corporate groups, in Europe, North America



and Asia, which are in general looked after by local sales agents. After all, "for small and medium-sized enterprises, an international presence is often more feasible through independent trade representatives than own subsidiaries," says Petra Bültmann-Steffin, Managing Director. Bültmann can be found wherever there is a very high demand for quality, both in industrialized countries as well as emerging economies. The circle of customers ranges from automobile sub-contractors to household installations and medical technology to jewellery and watches. Over the years, Bültmann has gained a reputation for itself as a partner for the development of new manufacturing processes.



■ *"The right sales agent in the target country, who is at home in the relevant customer segment, represents a very good basis for rapid market entry."*

Petra Bültmann-Steffin, Managing Director, Bültmann GmbH



Bültmann GmbH

Hönnestr. 31
D - 58809 Neuenrade-Küntrop
Telephone: +49 - 2394 - 18-0
Email: info@bueltmann.com
Internet: www.bueltmann.com

Founding year: 1972
No. of employees: 130
Turnover in the financial year 2010/2011: Around 23 million euro
Foreign share of turnover: 80 %

Presence in foreign markets: Australia, Belgium, Brazil, Canada, China, Finland, France, Great Britain, Greece, India, Israel, Italy, Norway, Poland, Russian Federation, Spain, Sweden, Switzerland, Turkey, USA

Patents: Various patents in the area of drawing, peeling, straightening

Awards: Hermes Award 2008, German Environmental Award 2009, European Environmental Award 2010, amongst others

Member of Netzwerk ZENIT e. V.: Since 2010

Business field: Machine and plant construction

Clients: Semi-finished products industry worldwide with high demands on product quality and plant performance

Special expertise: Joint development of individual and reliable solutions for and with our clients to increase their competitiveness; our innovation capability - "always one step ahead"

Interested at international level in:

- Partners for research projects
- Sales and distribution partnerships
- Technology cooperation

Outlook: "We want to further strengthen our market position through innovative ideas and the highest degree of reliability. In so doing, we want to underline our ambition of being a global player whose business operations are environmentally compatible, without losing sight of our responsibility for our employees and the region." Petra Bültmann-Steffin

Coatema. **Active at national and international level for 40 years.**

Coatema, a family business in Dormagen, offers customized solutions for printing and coating processes. Its portfolio comprises both laboratory facilities for small test series as well as production lines for large-scale work. Coatema Coating Machinery GmbH is a supplier of equipment for the coating of various substrates such as textiles, paper or foils. Coatema machines can be used in the manufacture of high-tech products such as batteries, fuel cells, solar cells, flexible electronic products or pre-pregs.

History

Herbert Giessmann founded Coatema in 1972 in Neuss as an engineering office. As Design Manager in textile factories in Krefeld, Mönchengladbach and Aachen, he had already gathered extensive experience with technical textiles. As a freelance designer, he was responsible for planning turnkey plants and concentrated on the Asian market from early on, where he supplied compact plants in conjunction with his know-how in the area of textile coatings. In 1975, he set up a first joint venture with a Chinese company, which bought Coatema machinery to produce imitation leather and floor coverings.

Innovation and continuous further development are important impulses for this family business. Soon the old premises became too small for all these developments and so Coatema moved to new buildings in Dormagen in 2006. Apart from administration, design, manufacturing and assembly are also located on the firm's new site, as well as a technical unit with fully operational pilot and production equipment covering over 1200 m². It is here too that the annual international symposium takes place, where experts from science and commerce present the latest developments in the areas of printing and coating and also demonstrate them in practical trials.

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The company's almost 40 years' experience as market leader for modular laboratory and manufacturing equipment is its source of inspiration in the development of new apparatus and the improvement of existing systems. Thus in 2010 the Smartcoater was developed: laboratory apparatus which makes it possible to demonstrate on a small scale the complete manufacturing process of a product or its individual components. And using minimum quantities of substrate and chemicals in the process. Although the Smartcoater was originally conceived as a standard machine, Coatema now manufactures it to individual product and customer requirements.



■ *"Fortunately, there is considerable creative talent in the coating sector and we are known there for our individual solutions. For us, it is exciting over and over again to put our clients' innovative ideas into practice in our technical unit with its over eleven pilot lines and a production unit with 2000 mm working width, and to draw here on the knowledge available in a network of international research institutions."*

Dr. Andreas Giessmann, Managing Director, Coatema Coating Machinery GmbH

Apart from innovation, above all tradition is a motor of this family business. Since 1991, the second generation is actively involved in the firm: Herbert Giessmann handed over the management of the company to his son, Dr. Andreas Giessmann, whilst however still playing an active role in the business. The links to Asia established early on are also still being nurtured. Asia is an important market for this Dormagen firm and so there are now representatives in China, Japan, Korea, Taiwan and Singapore. In addition to Asia, there are countless clients in Europe and America. Through its presence at international congresses and exhibitions, contacts are constantly being made to new potential customers and previously unexploited markets opened up. Prospective customers can visit the factory in Dormagen and test the machines and naturally also purchase one which is tailored to their own individual product.



Coatema Coating Machinery GmbH

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D - 41539 Dormagen
Telephone: +49 - 2133 - 9784 0
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Internet: www.coatema.de

Year founded: 1972
No. of employees: 92
Turnover 2011: 15 million €
Foreign share of turnover: 40 %

Presence in foreign markets: France, Benelux, Italy, Great Britain, Sweden, Norway, Finland, Denmark, Turkey, Russia Federation, USA, Singapore, Taiwan, Korea, China, Japan, India, Brazil

Member of Netzwerk ZENIT e.V.: Since 2011

Business field: Mechanical engineering

Clients: Manufacturing firms in a wide variety of areas of functional surface production

Special expertise: Market leader for customized solutions for printing and coating processes for high-tech industries

Interested at international level in

- Partners for research projects
- Sales and distribution partnerships
- Technology cooperation

Outlook: "In the next months, we will be expanding our already extensive range of laboratory and pilot facilities and thus enhancing still further our success in this area. The Smartcoater is one of our newest developments and can already substantiate this success: It has not only won prizes, but is also already being well received by our customers." Dr. Andreas Giessmann

eltherm. **Entering new markets with experience and innovation.**

eltherm GmbH in Burbach, an SME operating at international level, numbers amongst the leading manufacturers worldwide of heat tracing systems.

Over 40 years of know-how, highest quality standards and flexibility characterize this expanding owner-run company. Its clients include, for example, Daimler, VW, BASF, Linde, Siemens, Deutsche Telekom, Orange, Vodafone, Zentis, Evonik and AREVA.

Special product features

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Scarcely any industry can do without heat tracing in its production processes and it also plays an important role in frost protection and hot water production in buildings. The range of applications in industry, where reaching and maintaining specific temperatures or frost protection are required, is very broad. The systems are mostly used in the chemical, oil and gas industry, but also in power plant construction and the automotive or food industries. eltherm is a specialist for innovative heating cables, heated hoses, heating mats and jackets, measuring and control instrumentation, as well as the corresponding accessories. With the production of high-tech self-regulating heating tapes, the company ranks in the premier league of heating cable manufacturers. Only about ten manufacturers worldwide have command of this technology and eltherm is the only one in Germany.



History

eltherm Elektrowärmetechnik GmbH was set up in 1991 in rented facilities. Both founders are former employees of an international heat tracing company. Their joint start in self-employment was a success story from the outset. Pioneering work was performed in the shape of an electrical heating system for a sugar silo in 1994, with which the firm could establish itself in the marketplace. One year later its premises became too small, so that work began on the building of new production and administration facilities. In that year, eltherm established its innovative electrical tank container heat tracing systems on a grand scale and won a significant contract from Procter and Gamble. When it moved into its new premises in 1996, eltherm already had 20 employees. Since then, its production area has increased threefold and considerable investments have been made in expanding manufacturing capacities. The firm, which was renamed eltherm GmbH in 2009, today has 112 employees.

Since it was founded 20 years ago, the company has enjoyed a consistently positive development. Turnover has increased year by year and the firm seen rapid growth. Above all exports play a key role in this growth, which is far greater here in comparison to the domestic market.

■ *"The topic of internationalization should be addressed with care, above all by small and medium-sized enterprises. It is important to enter into strategic partnerships at local level in order to be able to gain a foothold in the market in question. Without knowing the special peculiarities of the market and local customs, it can be very difficult to become established in foreign markets. The local German Chamber of Foreign Trade can be very helpful here, as can ZENIT's international experts."*

*Frank von der Heyden, Managing Director,
Marketing & Sales*



eltherm GmbH

Ernst-Heinkel-Str. 6-10
 D - 57299 Burbach
 Telephone: +49 - 2736 - 44 13 0
 Email: info@eltherm.com
 Internet: www.eltherm.com

Year founded: 1991
 No. of employees: 112
 Turnover 2011: 22 million €
 Foreign share of turnover: 56 %

Subsidiaries in foreign markets: eltherm UK Ltd.,
 England
 eltherm Asia-Pacific Pte. Ltd., Singapore

Awards (optional): Innovation Prize 2007
 Hoppenstedt Credit Check – Top Rating 2011

Member of Netzwerk ZENIT e.V.: Since 2002

The setting up in 2010 of eltherm Asia-Pacific Pte. Ltd. and eltherm UK Ltd., the subsidiaries in Singapore and England, was a milestone significant in meeting this development. Both firms enjoyed a successful start and have already attracted several projects worth millions. More subsidiaries are already being planned, as eltherm wants in future to expand its international involvement above all in Europe and Asia.

Sales and marketing at eltherm are working closely together here, in order to arrive at a thorough analysis of the market and weigh up the opportunities and risks prior to market entry. Important decision criteria before entering into a partnership or setting up a subsidiary in an export country. Not only the competitive situation plays a role here. It is necessary to clarify the legal situation and what bureaucratic obstacles might be encountered.

Business field: Electrical heat tracing systems

Clients: Chemical and petrochemical industry, oil and gas industry, power plant construction, automotive industry, plant engineering, food industry, electrical appliance wholesalers

Special expertise: Engineering company with own production site 40 years' experience in the sector

Pioneer in electrical heat tracing for tank containers and sugar silos

Interested at international level in:

- Partners for research projects
- Sales and distribution partnerships
- Technology cooperation

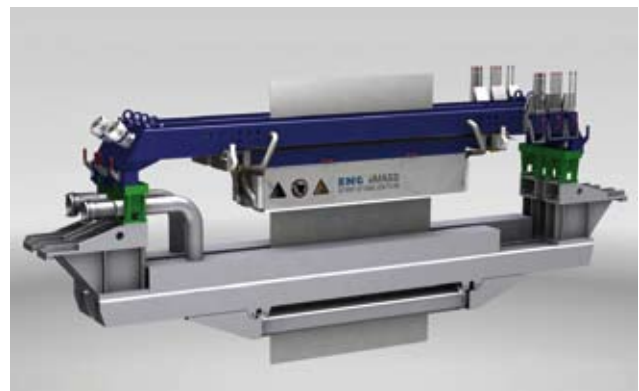
Outlook: "Since it was founded 20 years ago, eltherm has experienced a consistently positive development. Its turnover and thus also the company itself have grown continuously – with an above-average rise in exports. Internationalization is for us an important growth factor. Establishing our subsidiaries in Singapore and England were therefore a significant milestone. More international subsidiaries are planned or else already being set up." Frank von der Heyden, Managing Director, Marketing & Sales, eltherm GmbH

EMG. Technology lead and international presence.

EMG Automation GmbH in Wenden in the Sauerland are specialists in the production automation of continuous manufacturing processes in the metal industry and global market leader in air brake systems for drive engineering.

The company has a long and successful history. As early as 1946, it was already setting the world standard in control technology and since 1999 has supported quality assurance in the steel industry with new and innovative products. Innovation, so EMG's self-conception, is the basis for technology and market leadership. This is not just understood as the result of innovative products, but as the consequence of a strategic concentration on key areas of global demand. More than 6.000 customers in over 90 countries are the result of this strategy. Some international subsidiaries and partnerships were established over 30 years ago and make a major contribution to the profitable growth of the company.

Its international growth strategy began in 1977 in Brazil and in the 1980s in China. Apart from China and Brazil, BST International GmbH, the EMG subsidiary, is also represented with manufacturing firms in Japan, India and the USA. In order to reach the goal of being market leader, utmost importance was attached to the areas of innovation and globalization, which have established themselves as



the cornerstones of EMG's company strategy. Technology leadership, cost leadership and diversification are further aspects of its business model.

Niche markets

With its products and solution concepts, EMG Automation GmbH is global market leader in relevant niche markets. So that this stays the case in future too, its products are tailored to human demand, that is, to megatrends: industrial manufacturing, mobility, health, environment and new consumer patterns. With this strategic product focus, EMG can actively participate in shaping the current

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■ *“Every country has its own distinct characteristics; and when operating internationally, cultural differences play a crucial role. Our experience has shown that authenticity and respect from both sides are extremely important. Together, they form the basis for smoothing out any potential cultural conflict. An interesting point in this context is how we are viewed by our subsidiaries. The terms we hear most often are organization, processes, quality and technology – at the end of the day, we must admit that we are really typically German.”*

Siegfried Koepp, Chairman of the Management Board (right) and Edgar Michael Schäfer, Managing Director

shift in demand from industrialized nations to emerging countries. A prerequisite for this is that there is not only a product strategy but also an international manufacturing and distribution network. The example of China shows how uniting these two aspects works.

China's transition to a market economy since the 1980s was the starting shot for an unprecedented wave of modernization – at an equally unprecedented speed. From the beginning, EMG was a partner in the Chinese "Economic Miracle". After all, innovative products which ensure process stability are indispensable throughout the entire world. Already in the 1980s, the company granted a licence for the construction of air brake devices in accordance with its own technical standard to the Chinese state and built up a sales and distribution network with a local Chinese partner. In 2006, sales and service activities were united in EMG Automation (Beijing) Ltd. After five successful years, an additional assembly shop was erected for the manufacture of EMG products for the Chinese market. On 16th August 2011, the 800 m² hall, which has been built to western standards and norms, was ceremoniously inaugurated. Working conditions were formulated and jobs created in accordance with "EMG standards".

Apart from EMG's activities, the group is also represented in Shanghai through the sales and manufacturing facilities of BST International GmbH and a business centre of one of its other associated companies, elexis AG (opening late 2011).



EMG Automation GmbH

Industriestr. 1
D - 57482 Wenden
Telephone: +49 - 2762 - 612 0
Email: automation@emg-automation.com
Internet: www.emg-automation.com

Year founded: 1946
No. of employees: 384 (status 31.12.2010)
Turnover 2011: Considerable growth expected
Foreign share of turnover: About 60%

Presence in foreign markets: Active in the global marketplace with 34 agencies, including own subsidiaries, joint ventures and sales representatives. Further information under: <http://www.emg-automation.com/en/contact/contacts-worldwide/>

Member of Netzwerk ZENIT e.V.: Since 2006

Business field: Automation technology and quality assurance systems for metal, paper and plastics production, as well as the films and tyre industries.

Clients: End users and OEMs in the above-mentioned industries worldwide.

Special expertise: As a reliable, sound and innovative partner, EMG Automation not only offers single components or systems, but also sophisticated, reliable holistic solutions for the many different requirements of our international customers.

Interested at international level in:

- Technology cooperation
- Development cooperation
- Sales and distribution partnerships

Outlook: "Think global, act local". This guiding principle makes a crucial contribution to our being able to establish ourselves successfully worldwide and in very different international locations: Success which has much to do with mutual esteem, trust, and appreciation of the culture in question. Our staff and our representatives worldwide are proud to be part of the international EMG family." Siegfried Koepf

enviplan. **Tenacious, self-confident and resilient.**

enviplan Ingenieurgesellschaft mbH in Lichtenau-Henglarn is an owner-run engineering company, which since 1988 has been developing integrated solutions in the area of industrial and municipal waste water.

Roland Damann, founding partner and Managing Director, has clear views on the topic of innovation: Innovation often suggests just one thing: the “big bang”. Innovation however rarely starts with a clash of cymbals; often it is not even recognizable as such a lifetime long. What is important first of all is to do your homework, whereby tenacity and concentrating on your strengths prove expedient. That trusting in its own technology was justified, is reflected in the company’s history of success. As newcomers, enviplan had already developed and manufactured an oxygen feed system in the 1980s and 1990s, which was patented worldwide and revolutionized salmon breeding. Astronomic increases in growth and production figures were achieved with the system until the market all but collapsed in the late 1990s as a result of the enormous overproduction. Whilst this development would have spelled disaster for other firms, this was not so in the case of enviplan. From then on, the company began developing

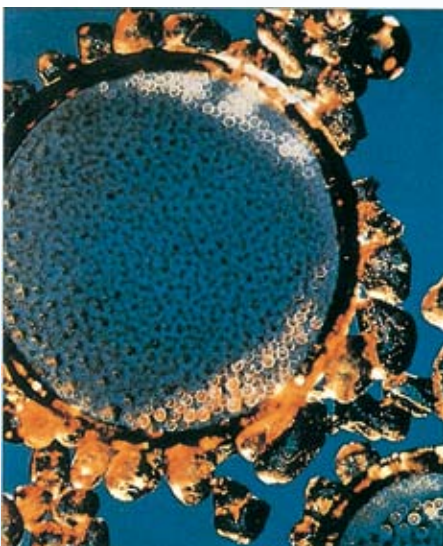
technologies for the cleaning of industrial and municipal waste water. Innovative technologies, of course.

enviplan bucked the trend of past crises where firms were merged, bought, sold or taken over. The company became more self-confident and realistic and decided not to relinquish its own capabilities, even at the price of not being one of the largest in the sector.

“We were convinced of our technology and of the idea and swam amongst the sharks in an established waste water treatment sector at that time with our microflotation technology. And it was a long time before we could achieve, as a result of excellent references, a significant market share. And suddenly we were market leader in our field”, says Roland Damann.

International Projects

Today, if you think of flotation, a process where even ultrafine dirt particles are filtered out of waste water by means of microscopically small air bubbles, there is no way round enviplan and its patents. And its list of references reads like the who’s who of industry: clients such as Airbus, the German navy, the United Nations, as well as almost all companies in the food-processing industry, are amongst enviplan’s over 250 customers not just in Germany. For many years now, the firm’s international focus has been above all on Europe and the Middle East. Stepping beyond national borders is not new for enviplan. Already in 1984 when it was first set up, Damann and his team were working hard in Scandinavia, Canada and the USA and successfully marketing their technology there. “These markets were more open towards new technologies and not as rigid as the German market.”



And in the recent past too there have been transnational success cases. Thus the firm carried out projects in 2010 with Spanish and Egyptian partners, who were able to solve the problems they were experiencing with waste water in olive production and the marble sector thanks to enviplan's innovative technology. Some 25 percent of enviplan's turnover today is generated by international projects. And perhaps that is precisely why its growth can be controlled by awarding manufacturing licenses for its own technology to selected firms, which also include competitors.



■ *"A crisis is often the starting point for greater success. This is clearly a virtue of small and medium-sized businesses. When else should you make the most of the fact that you can do something better than the rest? At the end of the day, it's quite simple: Clients, whether national or international, want solutions that fit and not just answers that miss the mark."*

Roland Damann, Managing Director, enviplan Ingenieurgesellschaft mbH



enviplan® Ingenieurgesellschaft mbH

enviplan® Ingenieurgesellschaft mbH
Dammstraße 21
D - 33165 Lichtenau-Henglar
Telephone +49 - 5292 - 9869-0
Email: damann@enviplan.de
Internet: www.enviplan.com

Year founded: 1988
No. of employees: 8
Turnover 2011: 2.5 million €
Foreign share of turnover: 25 %

Presence in foreign markets: Spain, Italy, Middle East, Egypt

Patents: About 20 patents and trademarks

Member of Netzwerk ZENIT e.V.: Since 2001

Business field: Engineering services, industrial and municipal waste water

Clients: Airbus, German navy, Bayer AG, BP, CIBA, Lorenz-Bahlsen Snackworld, Nestlé, Opel, United Nations, refuse sites, large bakeries, dairies, food industry

Special expertise: Fast, unbiased and competent consulting services

Interested at international level in:

- Expanding submarkets for industrial waste water systems
- Granting licences to engineering firms
- Technology cooperation

Outlook: "enviplan® will grow slowly, soundly and healthily with a solid equity base. Our goals are the marketing of unrivalled technology and a high market share abroad." Roland Damann

GEOHAUS. **Precise data for optimum results.**

The GEOHAUS Group comprises experts from different disciplines who work on various aspects concerning the topics of geoinformation and property matters.

Geoinformation forms the basis for many economic and administrative processes. Regardless of whether a property boundary, the value of a public easement, the position of a vehicle or the highly precise measurement of machine components is involved, these are all examples of geoinformation which, through their reference to time and space, describe our environment and civilization.

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GEOHAUS deals with both technical as well as legal issues. What at first seems like a balancing act is mostly closely connected in everyday life: A land development plan without detailed geometric data is of just as little value as a precisely preserved piece of evidence which won't stand up in court. This applies for all areas of the Group's activities, such as the obtaining of planning permission for plots of land, infrastructure planning, land and environmental management, GPS and industrial surveying, as well as the respective engineering tasks.

The topic of geoinformation is an international terrain with high rates of growth. Whilst georeferencing has since developed into a mass phenomenon, the GEOHAUS team in Mülheim has been dealing for over 60 years with qualitatively high-value data which characterize facts and rights regarding land. There is demand for this above all from the area of e-government and that part of the economy which requires high-quality data. In accordance with such clients' specifications, companies in the Group draw up land development plans, provide consulting services in strategic property issues and evaluate and document data regarding land in order to secure and accelerate economic activities.

In order to do justice to these complex tasks, precise handling of a very wide spectrum of measuring and sensor apparatus is necessary, which also includes an immersion into mathematics and physics, as well as consistent quality management. That the GEOHAUS Group is always at the

forefront of innovation is substantiated by various research projects, its development of instruments and equipment, and its patents.

International activities

The experts from Mülheim were already active abroad at the beginning of the 1980s. Thus one of the Group's companies, GEOsat GmbH, was a pioneer in the use of GPS in land survey. Today too this is still much in demand at international level. A particular highlight was the controlling of the 1500-kilometer state border between the Yemen and Saudi Arabia. And the Group's expertise regarding the German property protection system with land register and real estate cadastre is also in demand in other countries.



■ „GEOHAUS is a place of cooperation. Anyone wanting to grow abroad needs friends there, who speak the same language and are committed to the same high quality standards. We are involved in a large number of partnerships and open for new ones. They are both the motivation and the basis for a close working relationship.“

Managing Partner Dr. Otmar Schuster (left) with his son, Hanns-Florian Schuster



GEOhaus-Gruppe

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D - 45468 Mülheim an der Ruhr
Telephone: +49 - 208 - 45000 0
Email: dr.schuster@geohaus.de
Internet: www.geohaus.de

Year founded: 1950
No. of employees: 35
Turnover 2011: 4 million Euro
Foreign share of turnover: 10 %

Presence in foreign markets: Abu Dhabi, partners in UK, Poland, Bulgaria

Member of Netzwerk ZENIT e. V.: Since 1984 (founding member)

Another task was to answer national and international demand for the calculation of rental space which led to different methodical approaches. As a result, specific software products evolved: the www.geohaus-online.de project portal, the Geometer MX GPS measuring device and the Geobox-Office software. The youngest product with tremendous export potential is the CARGOPORT® system, which comprises lasers and other sensors for the controlling of bulk solids and mass flow.

Managing Partner of the GEOHAUS Group, Dr. Otmar Schuster, is also active at international level in European committees too. For example, as Chairman of the Supervisory Board of ZENIT GmbH he is a member of the Policy Group at the DG Enterprise of the European Commission, consulting in terms of SME politics and innovation.

Business field: Geoinformation

Interested at international level in:

- Partners for the setting up/renewal of property protection systems
- Sales and distribution partners for positioning and telemetry solutions

Outlook: "In our international business activities, we will continue to work on the further development of unique and distinctive products, on solutions for our clients' complex business processes and on consolidating our consulting services in the area of real estate cadastres. In the domestic market, our focus will be above all on strengthening our strategic consulting portfolio in the areas of property issues and process solutions in logistics and telematics." Dr. Otmar Schuster and Hanns-Florian Schuster

GERSTEL. Innovative solutions for laboratories.

GERSTEL GmbH & Co. KG is a leading manufacturer and supplier of chemical analysis sample preparation systems for the automated determination of trace organic compounds in solids, liquids and gaseous samples.

What can I do that others can't? This is what Eberhard Gerstel (1927-2004) asked himself when he founded "Labormechanik Gerstel" in Mülheim an der Ruhr in 1967. The company was founded in a double garage, which had been converted into a workshop for fine mechanics. The precision mechanics master craftsman, who up until that point was employed at the Max Planck Institute for Radiation Chemistry (MPI), was very experienced in designing and building laboratory devices and instruments to specification. Demand was great, but there was a shortage of skilled and clever people capable of developing practical and useful devices from ideas. Eberhard Gerstel Sr. saw his chance and seized the moment. Today, 44 years later, the company he founded is still family-owned and now run by his sons. The company name has been changed to GERSTEL GmbH & Co. KG, since the word "laboratory mechanics" no longer adequately reflects the company's extensive range of solutions and services: Whether for drinking water or for food quality control, for the identification of odours in wine, scents in perfumes, contaminants in the environment or emissions from plastics and construction

materials, GERSTEL technology is always a step ahead when automated sample preparation and analysis is needed worldwide. The name GERSTEL is synonymous with innovation, high performance and excellent quality. The company has twice been ranked amongst the "Top 100" most innovative German SMEs.

Global expansion

The foundation for its success was also laid through a wide range of partnerships with internationally renowned scientists and enterprises. For example, GERSTEL is the leading solutions partner worldwide of Agilent Technologies, the global leader in gas phase and liquid phase analysis equipment. The partnership dates back to 1986. GERSTEL's visibility worldwide has grown considerably since then, along with the demand for GERSTEL technology: In 1994, GERSTEL founded its first subsidiary in the USA, the largest market worldwide for chemical analysis technology. Switzerland followed in 2000, Japan in 2004 and just recently two further have been established in Singapore and Brazil. "This was a necessary step", explains Eberhard G. Gerstel, "in order to meet efficiently the demand in major markets for GERSTEL equipment and systems". GERSTEL is represented in 70 countries by hand-picked and trained distributors.

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■ *"Any young entrepreneur who dares to venture abroad, for example to set up a subsidiary, is well advised to seek a strong partner to provide him with help and advice. ZENIT is such a partner."*

Executive board of GERSTEL GmbH & Co. KG (from left to right): Holger Gerstel, Eberhard G. Gerstel, Ralf Bremer



GERSTEL

GERSTEL GmbH & Co. KG

Eberhard-Gerstel-Platz 1
 D - 45473 Mülheim an der Ruhr
 Telephone +49 - 208 - 765 03-0
 Email: gerstel@gerstel.com
 Internet: www.gerstel.com

Year founded: 1967
 No. of employees: >160
 Revenue 2011: >30 million Euro
 Foreign share of revenue: 55 percent

Presence in foreign markets (extract): Argentina, Australia, Austria, Bahrain, Belgium, Belorussia, Botswana, Brasil, Cambodia, Canada, China, Denmark, Egypt, Finland, France, Georgia, Greece, Hungary, India, Indonesia, Israel, Italy, Japan, Jordan, Korea, Kuwait, Lesotho, Latvia, Luxembourg, Malaysia, Mexico, Myanmar, Namibia, Netherlands, New Zealand, Poland, Portugal, Russia, Slovak Republic, Slovenia, South Africa, Spain, Swaziland, Switzerland, Taiwan, Thailand, Turkey, Ukraine, United Arab Emirates, United Kingdom, USA, Vietnam, Zimbabwe.

Member of ZENIT e.V. network since: 1991

Eberhard G. Gerstel and Holger Gerstel put their company's success and its double-digit annual growth down to foresight, to offering what the marketplace needs, and to going international at the right time and at a controlled pace. "A technology company that wants to grow in a competitive environment must also have a broad regional presence throughout the world, in order really to be able to operate efficiently at global level", the two Managing Directors explain.

Regardless of this and despite all "globalisation efforts", a company which has its headquarters in Germany must not neglect its domestic clients. On the contrary, emphasizes Eberhard G. Gerstel: "Being close to our customers and keeping them happy are imperative in order for our business to be successful both in the domestic and foreign marketplace and to be able to assert ourselves in the contest with competitors at home and abroad."

Business field: Development, manufacturing and marketing of laboratory instrumentation for chemical analysis

Clients: Manufacturers of food; beverages; flavors; fragrances; pharmaceuticals; clinical products; chemicals and petrochemicals; polymers; packaging; textiles; flooring; automotive materials; semi-conductors. Laboratories, contract laboratories, Government and Research Institutions in the above fields as well as in environmental, public health, biotechnical, forensic and crime.

Special expertise: Solutions, including custom solutions including automated sample GC/MS and LC/MS, including integrated software.

Interested at international level in: Sales and distribution partnerships and technology exchange

Outlook: "Our objective is to maintain the company's impressive growth to date while striving for environmental sustainability. We are working to maintain and expand our market leader position in the field of sample preparation through extensive research and development activities and through partnerships. Special emphasis is being placed on innovative solutions for the automation of sample preparation combined with gas- and liquid chromatography coupled with mass spectrometry. We are working toward a total global presence and have ensured that we have further room for expansion at our global headquarters in Mülheim an der Ruhr, Germany, home to our company since 1967." Eberhard G. Gerstel

Industrial heat, energy and process engineering

GIWEP GmbH.

Innovative solutions from a single source.

GIWEP, a Mülheim company, supplies solutions for the monitoring and improvement of energy efficiency in thermal plants.

Its clients include plant engineers and operators in the steel, non-ferrous metal and metal-casting industry which want to build and operate their thermo-technical plants in a more energy-efficient manner. Since almost 40 percent of industrially used energy is consumed in such processes, the reduction of energy consumption is one of the most important tasks for the future from both an economic and ecological standpoint.

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In order to master this enormous task, the energy specialists from Mülheim offer a package of measures which is both holistic and sustainable, as well as individually aligned to a specific plant of production technology.

History

GIWEP GmbH was founded almost 25 year ago in Mülheim an der Ruhr. And at that time its founders were already pursuing the objective of optimizing particularly energy-intensive processes in the production of metal materials with the help of the computer technologies which were then in the process of development. In the early days, the company only developed and supplied automatic process control systems with which existing thermal plants could be run in an energy-optimized way. Work focused on

heating and heat treatment plants, such as are used for the production and processing of slabs, sheets, profiles, pipes, tracks etc. Energy saving and energy efficiency have since become a core requirement in politics too. In order to achieve global environment and climate objectives, the German federal government is targeting a reduction of primary energy consumption of 50 percent by the year 2050. As a consequence, GIWEP's range of tasks has expanded: Today clients are offered "from one source" the energetic analysis and metrological testing of their plants, suggestions for solutions and the engineering to improve them, as well as the implementation of modernization measures in those parts of the plant relevant to energy consumption. Compared to the baseline, energy savings in thermal processes of over 15 percent are possible.

The nucleus of the modernization measures now as before is the automatic process control systems, which work in accordance with the tried-and-tested observer-predictor principle. In this way, not only can energy saving but also product quality be improved and stabilized at a high level – an important requirement for the use of modern high-tech materials.

■ „Internationalization can only be successful if it is consistently tailored to the target market. Economic and social conditions play just an important role as personal customer relations. As a small company, we need competent local partners and are profiting here from ZENIT's experience and contacts in other European countries“.

Dr. Hansjochen Oertel, Managing Director GIWEP GmbH





About ten years ago, once considerable experience in the area of technical-technological feasibility and results from a wide variety of projects in steel and rolling mills in Germany with regard to energy saving and quality improvement were available, GIWEP dared to take its first steps abroad. What proved to be especially important here was contractual issues as well as guarantees and terms of acceptance. A key to securing stable and long-term exports is the Internet, with which fast customer service and uncomplicated technical support first became possible. Over the past years, over 25 projects have been implemented in almost 15 countries worldwide. This also includes cooperation projects with strategic partners initiated through EMO – Energy-optimized Modernization of Industrial Furnaces - a newly established network with ZENIT as partner and coordinator.



**Gesellschaft für industrielle Wärme,
Energie- und
Prozeßtechnik mbH**

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D - 45479 Mülheim an der Ruhr
Telephone: +49 - 208 - 439253-0
Email: info@giwep.de
Internet: www.giwep.com

Year founded: 1987
No. of employees: 11
Turnover 2011: 1.8 million Euro
Foreign share of turnover: 30 %

Presence in foreign markets: South Africa

Member of Netzwerk ZENIT e.V.: Since 2003

Business field: Engineering, software and instrumentation for the improvement of energy efficiency in thermal processes

Clients: Siemens VAI, SMS Siemag, Andritz, Salzgitter, Voestalpine, Vallourec & Mannesmann, amongst others

Special expertise: Holistic approach to plants and processes aimed at an individually customized solution for energy-optimized modernization

Interested at international level in:

- Technology partnerships in the area of energy efficiency in thermal processes
- Partners for research projects
- Sales and distribution partnerships

Outlook: "For the next years, the reduction of energy consumption in industrial plants will be a core and continuous task. What is particularly challenging here is the linking of technological know-how with computer and automation technologies which are constantly developing and becoming more and more complex. We will use our extensive experience in this area to open up new sectors of industry and new markets abroad." Dr. Hansjochen Oertel

Haake Technik. **So simple and yet so safe.**

Haake Technik GmbH, which is based in the north-west of Germany, has been developing, manufacturing and selling safety equipment for machine and plant construction since 1987 and is highly successful worldwide.

The owner-run family business with about 80 employees in Vreden and Stadthorn operates at global level and has its own sales subsidiaries in France, Italy, Sweden, South Africa and Canada. A tight network of distributors supports its global sales activities. Almost all products, with the exception of manufacturing facilities in Canada for the North American market, are developed and produced by the company itself.

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Haake products can be found on revolving doors, for example. They are the black rubber strips (safety edges) that make sure no-one is crushed or trapped when going in or out. Theatre stages and airplanes on the other hand are secured with so-called bumpers. Here too the purpose is to prevent injury from crushing. Haake's safety mats are used, for example, in the production lines of automobile manufacturers to secure the area around hazardous machines and equipment. All three products are based on a simple but clever principle, the normal closed contact. When the safety edge, bumper or mat is activated, the

power supply is interrupted, stopping the dangerous motion of the machine. Competitors' products require additional electronics for this.

Internationalization

Already at the beginning of the 1990s, Haake decided to market its products abroad as well and set its sights above all on the mechanical engineering strongholds in other European countries. Thus in 1994, the first sales and distribution subsidiary was set up in France. Other cooperation partnerships followed. The firm's activities abroad were often the answer to concrete customer demand and not strategically planned far in advance. This changed when the product range was expanded with the HST door-locking system which was launched in 2002. Haake wanted to gain a foothold in the global market with this product. What seemed particularly interesting was the South African market, where competitors had already established themselves. Following a visit supported by the Federal Ministry of Economic Affairs in 2007, Haake decided to present the locking systems a year later at a trade exhibition taking place in Johannesburg. This decision turned out to be exactly right. A sales partner was found and clients in the shape of the mining industry and state energy supply corporation soon attracted.



Customers were convinced by the very high safety level, which is achieved with simple mechanical means. The locking units, which obey the principle of the "trapped key system", are meanwhile used to secure entire electrostatic precipitators, steelworks, and lifts in wind power plants.

Haake is also confident that the youngest child in its family of safety products, the valve interlock, has a promising future. The mechanical safety system for the controlled opening and closing of industrial valves is used in the petrochemical industry, in energy production, water supply and disposal, paper and plastics industries, as well as steel manufacture.



■ *"The right products, in conjunction with acceptance of other cultures and mentalities, are the basis for success in foreign markets."*

Oliver Haake, Managing Director, Haake Technik GmbH



Haake Technik GmbH

Master Esch 72
D - 48691 Vreden
Telephone : +49 - 2564 - 3965 0
Email: info@haake-technik.com
Internet: www.haake-technik.com

Year founded: 1987
No. of employees: about 80
Turnover 2011: About 12 % increase on previous year
Foreign share of turnover: 50 %

Presence in foreign markets: Via own sales subsidiaries -> Canada, France, Italy, South Africa, Sweden. Via distributors -> Australia, Austria, Belgium, Czech Republic, Denmark, Finland, Great Britain, Hungary, India, Luxemburg, Netherlands, New Zealand, Poland, Slovakia, Spain, South Korea, Switzerland

Member of Netzwerk ZENIT e.V.: Since 2008

Business field: Safety engineering for machine and plant construction

Clients: Audi, BMW, Daimler, VOLKSWAGEN, AIRBUS, W&H, BAYER AG, ThyssenKrupp, DORMA, RWE, SHELL and PETRONAS, amongst others

Special expertise: Technical solutions for workplace safety are manufactured as highly efficient products which are simple to operate and handle.

Interested at international level in:

Sales and distribution partnerships
Technology cooperation

Outlook: "The need for protection of each individual is increasing and it is becoming recognized in foreign markets too that it is important to protect workers from accidents. Our workplace safety products are therefore particularly well received in emerging economies, not least due to their simple handling."

Oliver Haake

Hansa Luftbild. **Excellence and Innovation in Geo-information.**

The company produces information – and has done so since 1923. Hansa Luftbild's maps, aerial imagery, geospatial data and corresponding software lay the basis for the administration and further development of society. With its work, the firm supports a large number of governmental programmes and projects – in the meanwhile in over 70 countries.

Business development

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Berlin 1923: The forerunners of what was later to become Lufthansa give birth to a daughter - Hansa Luftbild. Aviation was and still is their common affiliation, albeit Hansa Luftbild was set up as a specialist technical company for aerial photography.

The young company grew very rapidly and soon developed into the first port of call worldwide for aerial photography and mapping. Hansa Luftbild established an excellent reputation for itself early on through unique mapping projects in China, Greenland and the Antarctic, and enjoys the high regard of both professional experts and decision makers. This esteem has been preserved over the years and confirmed in the shape of several international beacon projects. Today, the company still produces aerial photographs and maps, but has diversified the greater part of its activities into broader business areas.

The new alignment of the company's business activities coincided with the expansion of innovative digital techniques. Geographic Information Systems (GIS), 3D geo-data processing, digital image processing, pattern recognition and customized solutions for geo-applications developed into a constantly growing business segment. This progress was underpinned by tailor-made software development, system integration and complex data analysis which today contribute – together with others - to the diversity of Hansa Luftbild's international geo-information services.

Geo-information services

The importance of geo-information services in laying the foundation for analysis, understanding and decision-making in complex projects is generally recognized. Business analysts even estimate that most business processes actually rely on spatial geo-data!

For Hansa Luftbild, it is both a stimulus and a challenge to contribute with its expertise to the better understanding and more efficient management of pressing global problems, such as city growth, greenhouse effect, ecological aspects or food production – to name just a few.

Land is also a focus of interest: it is an important asset in economic development. Land is precious – for individual landowners as well as for a nation. The sustainable development of this resource can only be achieved by using the tools of an innovative, professionally organised Land-Information-System (LIS).

Hansa Luftbild is a brand name. It is renowned for its reliable engineering, technical excellence and interdisciplinary expertise. The key to long-term success for the company – running its head office in Münster (Germany) - is customer focus in combination with sustainable business concepts.



In a rapidly changing market, these form the foundation for consistent innovation in the spectrum of geo-services.

Major customers are those international authorities and organisations with a plan to shape the future of their countries. It is this approach of "thinking ahead" which brings the creative minds of this world in contact with Hansa Luftbild.



■ „Going international in aerial survey and remote sensing is a "must", as the demand for geo-information does not stop at international boundaries. To this end, we have set up a team of specialists with international experience and a broad range of professional skills, who can adapt to the realities of the single European market as well as of the global marketplace."

Dr.-Ing. Paul Hartfiel, Chief Executive Officer of Hansa Luftbild

Hansa Luftbild
German Air Surveys



Hansa Luftbild AG

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D - 48147 Münster
Telephone: +49 - 251 - 2330 0
Email: info@hansaluftbild.de
Internet: www.hansaluftbild.de

Founding year: 1923
Staff members: 60
Sales 2011: approx. 7.5 Mio. Euro
Sales abroad: approx. 35%

International activities: Austria, Bahrain, Belgium, Brazil, France, Ghana, India, Italy, Ireland, Ethiopia, Kuwait, Moldavia, Morocco, Netherlands, Nigeria, Oman, Poland, Romania, Russia, Saudi Arabia, Thailand, Ukraine, United Arab Emirates, Yemen

Member of ZENIT e.V: Since 2002

Business segment: Geo-data acquisition, aerial survey, processing and refinement of geo-data, tweaking solutions for geo-applications, provision of geo-information

Customers: Mainly government organizations, world-wide, that are in need of up-to-date, reliable and precise geo-data

Special strengths: One of the few international companies that provide the entire spectrum of geo-information production – from data acquisition to solution programming to expert's guidance and qualified reports

Internationally interested in:

- Technical innovations
- Project co-operations
- Pooling orders

Corporate prospect: „International projects accompanied our business right from the start; international customers entrusted Hansa Luftbild with challenging tasks. These contacts are both economically vital and stimulating for our business since they provide for a customer focussed implementation of our portfolio. It motivates us to further expand our international activities. It is especially our international clientele which appreciates to have access to the gamut of our services.“ Dr. Paul Hartfiel

HF Mixing Group.

The best technologies for the best solutions.

The HF Mixing Group was formed in 2010. The activities of three companies - Harburg-Freudenberger Maschinenbau GmbH (located in Freudenberg, Germany, and Topeka, USA), Farrel (Ansonia, USA, and Rochdale, England) and Pomini Rubber & Plastics (Castellanza, Italy) - are now all combined within the HF Mixing Group.

Over 500 employees worldwide are involved in all types of compounding tasks. The product spectrum encompasses batch and continuous mixers. The portfolio includes individual machines and complete turnkey units, which also contain material dosing systems, as well as extensive automation and peripheral equipment.

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The group sees its strengths in its worldwide network of service and sales locations as well as its strong technical focus. New solutions for all types of compounding tasks are developed together with customers in modern technical research and development centres in Freudenberg, Rochdale and Ansonia.



Pioneering spirit

Over 100 years ago, Werner & Pfleiderer performed pioneering work when they developed the working principle which is today still typical for internal mixers. In 1900, the kneading machine known as the "Masticator" established a new era of rubber processing. At the end of the 1960s, Werner & Pfleiderer acquired Homrich, a mechanical engineering firm in Freudenberg. Following the takeover by Krupp in 1987, all activities in the area of rubber-mixing technology were concentrated under the name of Werner & Pfleiderer Gummitechnik, thus establishing a centre for mixing technology and process engineering for rubber production in Freudenberg.

Farrel's company history reaches back to 1840 and epitomizes the Industrial Revolution in the United States. In the 1850s, the Farrel foundry began with the production of chilled iron rolls for rubber processing. The Farrel Corporation resulted from the merger of the Birmingham Iron Foundry and the Farrel Foundry. In 1916, the Banbury® mixer was invented which has remained the standard for the tyre industry ever since. In 1963, the continuous mixer (FCMTM) was developed and introduced to the thermoplastic processing industry.

The mechanical engineering company founded by Luigi Pomini in 1886 in Castellanza/Italy was initially involved in the reconditioning of knitters and machines used in cotton production. The key factor behind its growth was the development of the mechanical sector. In 1949, Pomini started building machines for the rubber and plastics processing industry and in 1987 the VICTM principle was published, an innovation in the area of intermeshing mixing systems. In 1995, Pomini launched its own twin-screw dump extruders onto the market, which have been the standard extruder in the tyre industry ever since.

Vision

Many notable innovations in the area of mixing technology for the rubber-processing industry have been generated by companies in the HF Mixing Group. The product portfolio also includes system components as well as turnkey solutions for complete mixing room systems. In this way, this international group is operating as a technology partner which makes its products part of a value chain and which will in future play an instrumental role in shaping technological developments in rubber-processing and rubber-mixing techniques. The products and services of the HF Mixing Group make an important contribution to helping its customers respond efficiently to the technological and economic demands of the marketplace across the globe.



■ *“Internationalization opens up opportunities for business growth and turnover and sets the course for a better future. You could also say that internationalization is the key to success.”*

Prof. Dr. Andreas Limper, Managing Director, Harburg-Freudenberger Maschinenbau GmbH



Harburg-Freudenberger Maschinenbau GmbH

Asdorfer Str. 60
D - 57258 Freudenberg
Telephone: +49 - 2734 - 4910
Email: info@hf-group.com
Internet: www.hf-mixinggroup.com

Year founded: 1855
No. of employees: 570
Turnover 2011: About 160 million euro
Foreign share of turnover: About 85%

Presence abroad: Australia, Croatia, China, Czech Republic, France, Great Britain, Iran, Italy, USA

Member of Netzwerk ZENIT e. V.: Since 2009

Business field: Tyre industry and technical rubber products industry

Clients: Michelin, Goodyear, Continental, Pirelli, Phoenix, ContiTech

Interested at international level in:

- Partners for research projects
- Sales and distribution partnerships
- Technology cooperation

Outlook: “The future is secured. By joining forces as the HF MIXING GROUP, the course has been set for a better future. This applies not just for the economic feasibility but also for the quality of all our services. In particular our accumulated know-how makes us able to supply our clients with trend-setting products and solutions. The HF MIXING GROUP offers the most extensive network of manufacturing facilities, distribution and service locations as well as sales agencies in the world.” Prof. Dr. Andreas Limper

IMST.

Industry's High-Tech Workbench.

IMST, based in Kamp-Lintfort, develops mobile, satellite and short-range radio technologies. Of special importance is our scientific and technical support for digital radio technology and its diffusion in industry and SMEs.

The objective of this company from the Lower Rhine is to achieve sustainable growth and create employment in a healthy ratio between public-funded research and practical implementation of technological advances in open, competitive economic markets. IMST can look back on many research projects for the European Commission, the Federal Ministry of Education and Research, and the Federal Ministry of Economic Affairs. This experience has allowed IMST to add industrial value in the areas of standardized software, wireless modules, and design software. In addition, IMST holds industrial property patents for integrated circuits designs and other techniques. These circuits are manufactured in international chip factories, then marketed and sold, providing IMST with a revenue stream from licences and royalties.



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Identity

Much has changed over the nearly 20 years since IMST was founded. What remain unchanged are the values which shaped the future from the very first day: innovation, progress and cooperation. The company was founded on the initiative of the regional government in North Rhine-Westphalia, which used European structural funds for regions where coal mining had been abandoned. The goal was to launch a center of excellence for mobile radio technology; today IMST is a research-driven industrial engineering and design house with almost 180 employees. True to its mission, it continues to serve as a resource, to provide assistance to structural help for small and medium-sized enterprises. The business model is translating the latest developments from university and European/national research projects into commercially viable products and solutions. As an affiliated institute of Duisburg-Essen University, IMST leverages the potential of excellent and committed graduates in technical disciplines



■ *"IMST is a kind of high-tech workbench for industry. In international networks and EU partnerships, we create innovations and, through their marketability, real customer value is added."*

Dr. Peter Waldow, Managing Director of IMST GmbH

from the universities along the Rhine and the Ruhr. There is also an exchange of qualified graduates with international partner universities and academies.

Products and Services

IMST is one of the leading development houses in the world for high-frequency circuits, wireless modules, communication systems and microelectronic circuits. A key strength is customer-oriented support for innovative product ideas at each stage of development, including initial advice and supervision of series production. IMST also runs a chip design centre, developing and selling a range of innovative wireless communication modules that are introduced into the market with a complementary service offer. These modules allow the client to take easy first steps into the field of wireless communication (more information under www.wimod.de).

Thanks to the network of sales and distribution partners – generally smaller engineering offices - established and further developed in the 1990s, IMST's products and services are now available worldwide.



IMST GmbH

Carl-Friedrich-Gauß-Str. 2-4
D - 47475 Kamp-Lintfort
Telephone: +49 - 2842 - 981-0
Email: contact@imst.de
Internet: www.imst.de

Year founded: 1992
No. of employees: 180 permanent staff (increasing)
Turnover 2011: About 13 million Euro
Foreign share of turnover: About 30%

Presence in foreign markets Via representatives

Patents: About 20

Member of Netzwerk ZENIT e.V.: Since 2001

Business field: Research-driven industrial engineering and design for radio technologies and microelectronics

Clients: Industrial firms and public research institutions

Special expertise: 20 years of experience and access to cutting edge research and development

Interested at international level in:

- Customer relations
- Partners for research projects
- Sales and distribution partnerships
- Technology partnerships

Outlook: "Over the past years, IMST has developed from an affiliated university institute specializing in mobile radio technologies to an efficient industrial engineering firm with a scientific focus. Today, IMST is one of the leading technology specialists in the world for high-frequency circuits, wireless modules, communication systems and microelectronics. IMST is working together with ZENIT in EU networks and is attuned to new trends and results from basic research, which will add value to our clients' products when they go to market."
Dr. Peter Waldow

iSAM. Intelligent machines and solutions for industry.

iSAM AG is a medium-sized technology firm based in Mülheim an der Ruhr. Including its holding companies at home and abroad, the Group employs almost 100 people, primarily engineers, IT experts and natural scientists.

Since its launch in 1983 as iSAM Hellmich GmbH, the firm has been developing and supplying control and automation systems together with the corresponding logistics for industry, in particular steel manufacture, large diameter pipes, seaport transshipment and aerospace. In the field of “automated port equipment”, iSAM is global market leader with over 30 large-scale machines from fully automatic bucket wheel excavator to ship unloader.

From the Ruhr valley ...

Systems and equipment from iSAM AG were in use internationally from early on, even though the firm was almost exclusively a sub-contractor for major German plant construction companies. However, the ever-increasing development costs of complex systems demanded broader access to the international market - the German market alone had become too small for iSAM.

In 2001, only 0.3 million Euro out of a total turnover of 4.3 million Euro was generated with clients outside Germany. iSAM's objective was to expand its turnover outside Germany to a considerable degree, without however neglecting the home market. In addition, the “up-front costs” of developing new markets should be kept as low as possible. Research, development and production should remain in Mülheim an der Ruhr, spreading its activities over several locations in the company's size at that time would have endangered the synergies only just achieved.

... across the world

The guiding principle behind iSAM's internationalization strategy was to open up as large a market as possible for those products with which it had - with considerable effort - succeeded in occupying a top position in Germany. Importing products and services from abroad so far plays only a subordinate role here.

Since its foundation, iSAM has pursued a “one face to the customer” strategy, which means that even in the sales phase the client speaks to someone from the iSAM team who has already developed, built and put into operation similar equipment. This not only creates additional trust, it also guarantees a smooth transition from the specification to the development phase.

This advantage would have been lost if sales representatives had been used and own subsidiaries were not an option at the beginning for cost reasons. First contacts were therefore established using existing networks and links



to industry in Germany and projects were implemented exclusively from Germany.

Today, its products are sold and distributed via its own subsidiaries in the USA, Hungary and, since 2011, Australia too. And iSAM's intelligent control systems are not just in use in Europe, but also throughout the whole of North America, India, China and Russia.

In 2009, turnover had trebled in comparison to 2001 and was generated in equal parts in Asia, Europe and North America – iSAM has become a global SME.



■ *“Abroad, German companies are still associated with high quality and innovative solutions. If you fulfil these expectations, you can sell high-value products under fair conditions even in difficult markets.”*

Bernd Mann, Chief Officer Development, Design and Technology



iSAM AG Gesellschaft für angewandte Kybernetik

Alexanderstraße 46
D - 45472 Mülheim an der Ruhr
Telephone: +49 - 208 - 49 585-0
Fax: 0208 49 585-49
Email: info@isam-ag.de
Internet: www.isam-ag.de

Year founded: 1983
No. of employees: 50 in Mülheim, about 100 including subsidiaries
Turnover 2011: 12 million Euro
Foreign share of turnover: > 80 %

Presence in foreign markets: USA, Hungary, Australia (own subsidiaries)

Patents: EU, USA, Canada, Australia, Brazil and other countries

Member of Netzwerk ZENIT e. V.: Since 1997

Business field: Advanced automation and intelligent machines

Clients: Large and medium-sized industrial enterprises, in particular in the area of steel and pipe manufacture, mechanical engineering and aerospace, as well as logistics and transshipping

Special expertise: Innovative solutions. “If it can be done, we will do it and if it couldn't be done until now, we will at least try.”

Interested at international level in:

Sales and distribution partnerships
Technology cooperation

Outlook: “We used the last year to move forward with new developments like the automatic ship unloader for which no resources had been available when we were working to capacity. In 2011 we completed our first reference projects in Europe.. And for 2012 we want to profit more from the rapidly growing Asian-Pacific market.” Bernd Mann, Chief Officer Development, Design and Technology

JHT. All services from A to Z.

You don't necessarily need to be big to do big things. True to this motto, the 15-strong team at JHT Jakobs-Houben Technologie GmbH in Geilenkirchen offers innovative and affordable solutions in the area of plant engineering.

JHT develops coating and laminating systems as well as complete plants, which are used in the paper, film, foil and metal strip refining industry. Anyone seeking a competent partner, for example to make existing paper-processing equipment more productive or who as an energy supplier needs a designer for the largest bucket wheel in the world, will quickly find what he is looking for near Aachen. What began in 2003 as a small engineering office near the Dutch and Belgian borders, has since developed into a globally operating company with three business segments: Design of large-scale machinery, consulting services in the area of welding, and coating and laminating equipment. Coating heads, laminating stations, winders, test plants and complete lines from Geilenkirchen are found above all in Europe. This includes solid series components as well as highly specific special solutions.

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Active worldwide

But you will bump into JHT machines in India, China and the USA too. When describing the company's global approach, Alexander Houben and Peter Jakobs, the managing partners, emphasize: "For us, cities such as Hong Kong, Seoul or Vienna are not just spots on the map. We are there when we are needed." Latest reports on the international converting market show that the strongest growth is in regions in the Near and Middle East as well as South America. In the most important market segments of food, construction and industrial foils, growth of up to 55 percent is expected. The goal now is to establish the JHT name in countries such as Chile, Argentina and the United Arab Emirates.

JHT's engineering services are in demand from well-known companies such as ThyssenKrupp, SMS Demag and RWE Power. The firm is proud of being able to deliver everything the client desires, from process design of entire plants to derivative drawings for individual components.

Research and development projects

JHT is also open to working with other specialists. It has worked together within a joint research and development project on integrated coating control through combined ultrasound and laser technology with the LBBZ Laser Bearbeitungs- und Beratungszentrum NRW GmbH, which



■ *"In the coating and converting sector, a worldwide market presence is indispensable. Partnerships and professional support, for example through ZENIT, are important instruments with which to analyze and successfully develop international markets, especially for small and medium-sized enterprises."*

Alexander Houben, Managing Director, JHT



JHT Jakobs-Houben Technologie GmbH

Gutenbergstraße 35
 D - 52511 Geilenkirchen
 Telephone: +49 - 2451 - 9115110
 Email: alexander.houben@jht.eu
 Internet: www.jht.eu

Year founded: 2003
 No. of employees: 15
 Turnover 2011: 1.6 million Euro
 Foreign share of turnover: 60%

Presence in foreign markets: Direct sales

Awards: Winning project "AC2 – Growth Initiative"

Member of Netzwerk ZENIT e.V.: Since 2006

is also at home in Geilenkirchen (see also P. 44 of this brochure). The objective was to recognize more precisely faults in the coating of films and foils. The idea evolved during a visit to the International Mechanical Engineering Exhibition in Poznan. Both companies took advantage of the opportunity in 2006 to explore the Polish market and hold first discussions with potential cooperation partners. The project, funded by the German Federal Ministry of Economic Affairs, was launched together with a Polish partner. The new technology developed was integrated into the coating equipment after the end of the project and is today being successfully marketed. JHT does not shy away from cooperation at national level either. JHT is a member of RAIN - Resource-efficient Plant Engineering Network – a grouping of six enterprises which combine their services in the area of mechanical and plant engineering and market them together. Aachen University of Applied Sciences is also on board.

Business field: Coating and laminating equipment

Clients: Paper, film and foil converters worldwide

Special expertise: Flexibility, competence, innovation capacity

Interested at international level in:

- Partners for research projects
- Sales and distribution partnerships
- Technology cooperation

Outlook: "International converters are not penny pinchers! Technical innovation, operational performance and production speeds number amongst the most important decision factors, along with price/performance ratio, when buying new equipment and components. Through our product portfolio of technically innovative standard and special solutions, we can more than match the requirements of the international marketplace." Alexander Houben

Jüke. **Technology transfer and internationalization.**

As a service provider in the field of mechatronics, Jüke offers its know-how for the new and further development of clients' products, including project logistics and prompt delivery, in addition to manufacturing and assembly. Processes are certified in accordance with DIN EN ISO 9001:2008 and EN ISO 13485:2003+AC: 2007 (medical technology).

Having started in 1990 as a precision engineering firm with a staff of four, Jüke today has 60 employees and offers services in the areas of precision engineering and electronics, as well as the development, manufacture and assembly of complex products and systems. Considerable investments have been made: Jüke took over Elektronik-Umwelt-Technik in 1994 and three years later the development division of Meta Messtechnische Systeme Altenberge, thus building up core skills in the area of mechatronics and instrumentation. The know-how gathered in the field of industrial environmental monitoring and measuring technologies was used to gain a foothold in the segments of technical optics, medical technology, laboratory analysis and automation. Modern equipment and the highly qualified team ensure a high standard in both services and product development.

Special product features

Heinz Jürgens, aged 52 and owner-manager from the start, has attached great importance from the outset to innovation. 2007 was a particularly successful year: In cooperation with the Fraunhofer Institute for Ceramic Technologies and Systems IKTS in Dresden, a detector was developed which could trace even the smallest concentrations of halogenated hydrocarbons. It is not just handy but also does not need the radioactive source which was previously usual. It is used above all in clean rooms in the semiconductor industry which cannot do without the cleaning and caustic agents hazardous to health. Heinz Jürgens is sure: "The four-year development phase and the intensive technology transfer process

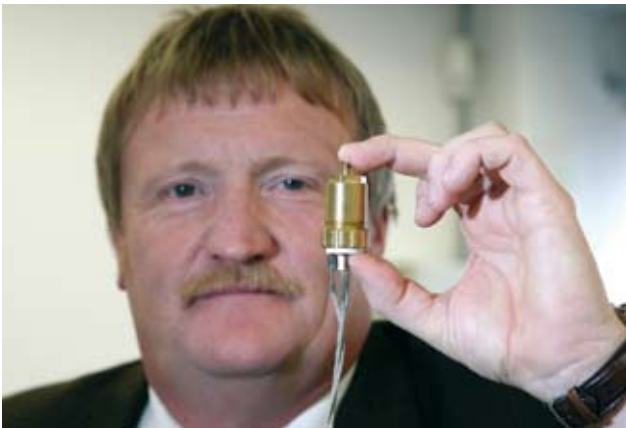
which accompanied it placed "high demands" on our company, but also consolidated our reputation in the long term as leading innovators."

The qualified technician and businessman is regarded as a networker par excellence, who nurtures contacts not just to potential industrial clients but also to various universities in the region and professional associations. Nor does he shy from using funding programmes, if these can help in the development of innovative products or services. As a member for many years now of the Netzwerk ZENIT e.V., he gets his information through various services or by visiting ZENIT events. He, or Martin Hovestadt, his colleague on the management board, uses above all the international brokerage events and delegation visits organized by ZENIT.



In the meanwhile, almost 70 percent of Jüke's turnover is generated directly or indirectly abroad. The firm attaches considerable importance to cooperation with other enterprises at home and in other countries, with which they develop and produce new modules or complete systems.

That the company has more or less done everything right is proven by the figures. Thus turnover, which is now about seven million euro, could be increased in 2010 alone by 20 percent. Growth is also planned for the current year.



■ *"Internationalization is an important opportunity for growth and global economic integration and at the same time broadens one's own horizon."*

Heinz Jürgens, Managing Director, Jüke Systemtechnik GmbH



Jüke Systemtechnik GmbH

Trumpfenstiege 2
D - 48341 Altenberge
Telephone: +49 - 2505 - 87-0
Email: info@jueke.de
Internet: www.jueke.de

Year founded: 1990
No. of employees: 60
Turnover 2011: About 8 million Euro
Foreign share of turnover: 50% direct

Presence in foreign markets: Yes, sales and distribution via an engineer in the Netherlands

Patents: 2

Awards: Münsterland Innovation Prize 2007, Prof. Adalbert Seifriz Prize 2008 and 3rd prize in the German Export Prize 2009

Member of Netzwerk ZENIT e.V.: Since 2005

Business field: Medical technology, optical technologies, Analysis technology, Biotechnology and Laboratories

Clients: GE Healthcare, Dräger Medical, Olympus

Special expertise: Development, design and production, Cross-industry systems supplier, Modules, systems and integrated solutions in the areas of precision engineering and electronics

Interested at international level in:

- Project partners for development and sales
- Reliable suppliers
- Technology network partners

Outlook: "Our company's development implies the preservation of existing partnerships, endeavours to open up new markets, and the readiness to keep our activities and thinking innovative. Here we can rely on our extensive know-how and experience, as well as cutting-edge technologies, equipment and processes. Our goal is to be a successful and stable company both for our clients as well as our staff." Heinz Jürgens

Kappes Systeme. **Cosmo- politan and down-to- earth into the future.**

Kappes Systeme GmbH has been developing and selling innovative storage products and business equipment from its premises in Bochum for 38 years. Customers associate with Kappes a consistent focus on the system concept, practice-based, long-lasting quality, and excellent service.

What is the best way to store small parts and tools? A question to which the storage specialists at Kappes have found an answer: panels, trolleys, drawer and vertical cabinets, heavy-duty cabinets, tool cabinets and many more from Bochum are today keeping order throughout the world with perforated and louvred panels and, under the motto of "Order can be arranged", are contributing to cost optimization and increased efficiency in the workplace.

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Special product features

High quality standards, excellent logistics, concentration on people as the users of fully and partly automatic processes, as well as a down-to-earth approach are principles which users of the various storage systems appreciate worldwide. The company knows what customers want, knows that space and routes cost money, that manufacturing processes must be logical and variable and expensive tools kept safely. These requirements were



■ *"Through its extensive advice and its business trips to Eastern Europe and Scandinavia, ZENIT has awakened and sharpened our senses towards the opportunities which cooperation with international partners can offer. Through these visits and the discussions there, we were able to find new customers who are actively buying our products. As a result of discussions in Eastern Europe, other dealers in France, Germany and Sweden became aware of us, with whom we are today working together and implementing joint projects on a regular basis. ZENIT really has been instrumental in prompting innovations at Kappes Systeme."*

Chris Wiederkehr, Sales Manager, Kappes Systeme GmbH

put into practice by means of a broad product range with **RasterPlan**, **RasterMobil**, **ErgoPlus**, **ErgoBlock**, **LogoChart** the firm's registered trademarks. Apart from the continuous further development of its products, the company is constantly fine-tuning and optimizing its product range with the help of innovative technologies. For example, modular designs have been developed for a large number of product groups, which make the overall product range even wider and thus increase customer benefit. If he wants, a client can grow with the Kappes storage systems and complement his factory and warehouse both optically and functionally even after years. Reliability many customers appreciate. Many a customer has underlined the worth of his own products by choosing qualitatively high-value storage systems.

History

The quality principle shaped already the firm's early days. After finishing his apprenticeship, its founder, Wolfgang Kappes, wanted to dedicate himself to fulfilling real demand with exceptionally good quality. So the 19-year old set up his own business without further ado. Since 1995, Kappes has been servicing the market with its own sales representatives and supporting its customers actively at their own premises. High customer satisfaction is ensured by the reliable high quality of the products, a broad product range, excellent service and fast delivery. The firm is regularly represented at LogiMAT and CeMAT, the two trade exhibitions in Germany, where it greets

**KAPPES**

Professionelle Lagersysteme

Kappes Systeme GmbH

Hüttenstr. 42
D - 44795 Bochum
Telephone: +49 - 234 - 94384-0
Email: info@kappes.de
Internet: www.kappes.de

Year founded: 1974
No. of employees: 23
Foreign share of turnover: 22 %

Presence in foreign markets: No own agencies;
at present imports

Member of Netzwerk ZENIT e.V.: Since 2004

longstanding domestic and international clients, as well as attracting new ones. Kappes quickly compensated for the short economic downturn; growth in exports is well into the two-figure range. The firm's objective is to increase further the foreign share of turnover of about 20 percent with regard to the market opportunities available at international level.

Kappes Systeme GmbH will be banking on Germany as a production location and consistent trade loyalty in future too. Sensible growth and minimization of risks will not only secure the jobs of a highly motivated workforce, but also guarantee the trade a reliable partner for practice-oriented solutions for storage and business systems.

Business field: Warehouse and business storage equipment

Clients: Specialist trade outlets, catalogue distributors, other manufacturers of factory and workshop equipment

Special expertise: Quality, fast delivery, no minimum purchase volumes, service

Interested at international level in:
Sales and distribution partnerships

Outlook: "In future too, we will be a reliable and fair partner for specialist retailers and our import company. Quality, together with purpose-based products, is the guarantee for continuous and stable business development. Closer communication with existing partners and peer groups as well as with new partners at home and abroad will help us to create greater awareness of our capabilities. There is a need to demonstrate that using qualitatively high-value "Made in Germany" products brings clear economic benefits." Chris Wiederkehr

K.I.M.W. **Competent, fast, practice-oriented and innovative.**

The Kunststoff-Institut für die mittelständische Wirtschaft NRW GmbH (K.I.M.W.), a specialist institute in Lüdenscheid for SMEs in the plastics industry, has established an excellent reputation for itself both at national and international level for increasing the quality and profitability of injection-moulded thermoplastic and duroplastic components.

As a private service provider, the institute was founded in 1988 as the industry's "extended workbench" and is thus one of the most experienced organizations in the sector. It supports its clients in the selection, development, optimization and realization of products, tools and processes in all areas related to plastics technology. Apart from joint projects between firms and development work, clients have a wide spectrum of services at their disposal with which to solve specific tasks in their own companies. A large number of further training and instruction measures ensure that practice-based know-how is passed on.

research and industrial enterprises. With the help of its own developments, numerous theoretical/scientific approaches have already been put into practice in SMEs and transferred to series production processes. In 2005, the Institute and its partners were admitted to "Germany's Networks of Competence" for the field of surface technology in plastics. Thus a well-functioning, continuously growing network is being successfully operated which focuses on sustainability and is borne exclusively by funds from industry. Since its foundation, the Institute has aimed at self-finance and sustainability. Its financial concept is designed on three pillars: Services, training and instruction and project work. Last year, contract work in the area of services was performed for about 1100 clients, many of them repeat customers, and 130 seminars and several symposia with around 2500 participants were staged. A further focus of the Institute's activities was and is the realization of joint projects between firms and development work.

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Transfer medium and connecting link

The main shareholder of the Institute as a limited company is an association of which the number of members has grown since 1988 to about 170 firms. All areas of the entire firm are certified in accordance with DIN EN ISO 9001, the laboratory additionally has ISO/IEC 17025 accreditation. In 2010, 13 cooperative projects were implemented together with 238 industrial partners. The Institute sees itself as a transfer medium and connecting link between university

■ *"Anyone wanting to take the step across his or her national border should make use of the wide range of services offered by the Enterprise Europe Network. Its brokerage events, for example, are a really effective instrument through which we were able to establish many lasting contacts."*

Thomas Eulenstein, Managing Director, Kunststoff-Institut Lüdenscheid





Kunststoff Institut Lüdenschheid

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 D - 58507 Lüdenschheid
 Telephone: +49 - 2351 - 1064190
 Email: mail@kunststoff-institut.de
 Internet: www.kunststoff-institut.de

Year founded: 1988
 No. of employees: 60
 Turnover 2011: 5.5 million Euro
 Foreign share of turnover: 10 %
 Patents: 12 own property rights

Award:
 1st place in competition: "Network of Competence 2009" - Best Network in Germany – Award for "Sustainable Growth" from Federal Ministry of Economics and Technology.

German Material Efficiency Prize 2009 - Special recognition award for the development of the INDUMOLD process from the Federal Ministry of Economics and Technology.

ZENIT Innovation Prize 2009 for the development of the INDUMOLD process.

Member of Netzwerk ZENIT e. V.: Since 2005

International activities

In order to achieve this above-average growth, not only was stringent market development implemented but also an increasing number of internationalization measures. The Institute offers a comprehensive range of training courses in English for specific target groups, as well as seminars, training and technology consulting worldwide. ZENIT GmbH also provided practical assistance in this internationalization process. In the autumn of 2008, representatives of the University of Belfast and the KIMW met in Mülheim to discuss a possible joint research project. Shortly afterwards, the two parties decided to submit an application for funding. Thanks to the activities of the Enterprise Europe Network, twelve partners from six countries were quickly rallied who in 2009 were pleased to learn that their proposal had been successful. The project, with a total volume of 2.1 million Euros of which about 540.000 were allocated to NRW, began in August 2010.

Business field: Plastics technology

Clients: Automobile industry, electrical engineering, telecommunications, sanitary ware, medical technology, space and aviation

Special expertise: Support along the full value chain. Nine specialist technical departments assist companies of all sizes and from all sectors in the selection, development, optimization and realisation of products, tools and processes.

Interested at international level in:

- Partners for research projects
- Sales and distribution partnerships
- Technology cooperation

Outlook: "The most important task for a service provider which regards itself as a bridge between business practice and science is the partners' satisfaction. These partners must assert themselves in the face of global competition. To this purpose, the steadily growing team at KIMW is not only working very hard in its core fields, but also playing an active role in subsidiaries and through its participation in other companies. And that is precisely the yardstick for the future: only those who do the job well and with foresight and resolutely take advantage of opportunities to set the strategic course can prove themselves in the long term in the marketplace." Thomas Eulenstein

LBBZ. High-tech as the springboard for internationalization.

LBBZ GmbH in Geilenkirchen near Aachen manufactures a broad range of products using laser technology and also upgrades tools produced by European OEMs with its patented LACID® hardening process.

The Laser Bearbeitungs- und Beratungszentrum NRW GmbH, the LBBZ, is an innovative service provider which has been working in the area of laser manufacturing with a practice-oriented approach and independently of specific manufacturers since 1991. As one of the largest laser manufacturers in industrial materials processing, the LBBZ offers a broad technological spectrum which covers laser welding, hardening, coating and engraving, in addition to laser cutting. Its clients are not just the large automotive OEMs but also small and medium-sized tool manufacturers.

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Special product features

The LACID® process patented by the LBBZ was developed on the basis of large OEMs' and special tool manufacturers' requirements. This special type of laser edge coating hardening stands out from other processes above all through the evenly distributed hardness, as well as the fast process control with patented temperature control.

This prevents, amongst others, molten material from adhering to discontinuous areas. Further benefits are online path programming as well as the complete absence of coatings, coolants or chemicals. The process guarantees minimum distortion so that no post-machining is generally necessary and the tool is immediately operational again. Experience with forming tools in car body construction has showed that service life can be improved by 300 percent or more.

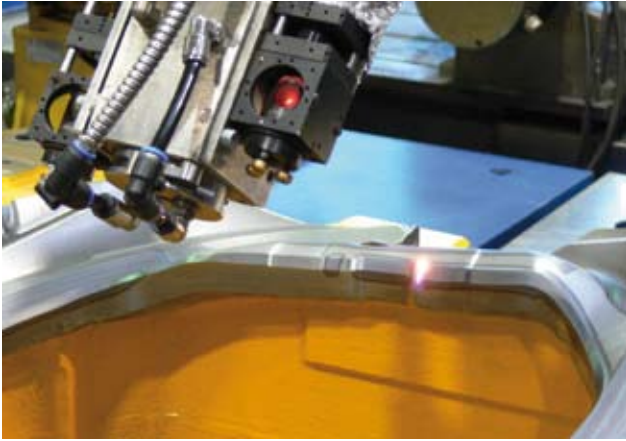
History

The LBBZ was set up in Aachen and initially located at the Fraunhofer Institute for Laser Technology. From the outset, the company's both deep and broad base in the field of laser technology were an opportunity and a challenge for its management. Through its closeness to various research institutions, ideas and young personnel were acquired which in the environment between industry and research formed the foundation for LACID too. The LBBZ today focuses on the core areas of laser-based material processing and manufacturing important to industry. A milestone in its development was the laser-assisted manufacture of camshafts and the start of mass production in 2000 which accompanied it. At the beginning of the new millennium, the company was still mostly servicing



■ *"As a member for many years now of the Netzwerk ZENT e.V., the LBBZ is both happy and keen to use ZENIT's services. This applies in particular to the systematic expansion of our activities abroad. In achieving our objective of marketing our innovative laser technology even more intensively in other EU countries, we have profited several times in recent years from ZENIT's support and its contacts throughout the EU. I can only recommend that all companies join the Netzwerk ZENIT e.V. and use its expert consulting services."*

Ulrich Berners, Managing Director, Laser Bearbeitungs- und Beratungszentrum GmbH



LBBZ

Laser Bearbeitungs- und Beratungszentrum NRW GmbH (LBBZ GmbH)

Gutenbergstraße 29
 D - 52511 Geilenkirchen
 Telephone: +49 - 2451 - 91117-0
 Email: info@lbbz.de
 Internet: www.lbbz.de

Year founded: 1991
 No. of employees: 75
 Foreign share of turnover: About 10 %

Patents: Many

Member of Netzwerk ZENIT e.V.: Since 2004

foreign markets in the border regions around Aachen. That changed when automobile production shifted to Central and Eastern Europe. These new locations gave the firm the opportunity to use its highly specific know-how to position itself in Eastern Europe too. This was also successful thanks to its active participation in a project funded by the State of NRW and supported by ZENIT: Ulrich Berners, Managing Director, took advantage of a business trip to the Czech Republic organized within the framework of this project to obtain a personal impression and hold first discussions. Just a short time later, a contract was signed with a local partner for reciprocal support in the area of sales and distribution. At present, the LBBZ is working with customers in the Netherlands, Belgium, Poland and Hungary on expanding the business. New contacts have also just recently been established to Turkey. Whilst in Hungary the intention is to supply and expand the LACID process in the area of automotive, the aim in other foreign markets is also to strengthen the position of laser welding and laser cutting.

Business field: Laser technology, production, contract manufacturing

Clients: Audi, BMW, Daimler, Ford, VW, automotive, industry, craft trade

Special expertise: Complete fabrication, innovative laser technology and production, laser hardening (LACID)

Interested at international level in:

- Customers
- Sales and distribution partnerships
- Technology cooperation

Outlook: "Through the development of our laser processes and products we manufacture ourselves using laser technology, we want to achieve even greater customer loyalty and thus an increase in business volume, amongst others in European markets too. We invest regularly here to ensure that production conditions are kept in an excellent state." Ulrich Berners

Leantechnik AG. **Taking innovations into new countries and sectors.**

Leantechnik is based in Oberhausen and manufactures high-precision, flexible gear rack lift drives which make it one of the leading suppliers worldwide of linear and automation technology.

Leantechnik AG's customer list reads like the 'Who's Who' of the automobile industry, with famous names such as Audi, BMW, Daimler, Ford, Jaguar, Seat or VW. Leantechnik supplies them with synchronous lift drives developed and produced in Oberhausen, which are used in all areas of vehicle manufacture.

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Product highlights

Customers appreciate the high degree of precision with which the gears operate: At a stroke of about one metre, products reach a maximum height difference of +/- 0.01 millimetre. They are used in all applications where movement must be synchronous, precise, fast and efficient. With the new generation of lifters, lifgo/lean SL 5, sale of which began in February of this year, the company is offering for the first time two series in a modular system, meaning that both high-precision as well as less sophisticated tasks can be solved in one plant.



Company history

It all began in 1993 with the bankruptcy of Schlüter, a firm in Dortmund, where Reinhard Janzen, today Managing Director of Leantechnik AG, was Sales Manager for the automation technology division. Initially, production, assembly, dispatch and all commercial transactions were all down to him, until six months later the first two employees joined and the firm moved to new premises in Mülheim an der Ruhr. In the same year, the "lifgo" gear rack lifter was developed and registered for a world patent and the turnover threshold of one million euro reached. These achievements were followed by first permanent supply contracts with automobile companies for the "Schlüter lift" in the area of tool making, introduction of the "VL non-felt roller" of a Duisburg firm into the product palette, the opening of first agencies abroad in the Netherlands and Belgium, the supply of first complete functional units, the introduction of CAD systems as the basis for the manufacture and delivery of engineering work for the automobile industry, and the purchase of first tool-making machinery. In 2000, the company had eleven employees which made a move to neighbouring Oberhausen necessary. In 2002, a Cologne automobile manufacturer converted a tool standard to lifgo. Turnover

■ The path to internationalisation

"It's precisely in the area of internationalisation, which is so important for us, that ZENIT has given us significant assistance over the years and helped us not only to tackle the topic of internationalisation strategically but also to find business partners abroad, for example in the framework of brokerage events. Firms planning activities abroad really ought to call in the ZENIT experts."

Reinhard Janzen, Managing Director, Leantechnik AG

increased to two million euro. At the end of that year, Leantechnik was transformed into a joint-stock company. The reason for this was the greater acceptance of this legal form, above all in the attractive US-American market. Further staff was employed and new agencies abroad opened, the turnover threshold of three million euro only narrowly missed. This positive development continued uninterrupted until early 2008. But a few months later the financial crisis became a global automobile crisis which left its mark on Leantechnik too.

Although there was a noticeable drop in turnover, the company was not hit as badly as most other firms in the mechanical engineering sector. A major contract from the USA saved its results and safeguarded the jobs of by now 30 employees. And Managing Director Reinhard Janzen is optimistic about the future too.



LEANTECHNIK AG

LEANTECHNIK AG

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Email: info@leantechnik.com
Internet: www.leantechnik.com

Year founded: 1993
No. of employees: 31
Turnover 2011: 4.4 million €
Foreign share of turnover: 15,5%

Presence in foreign markets: Netherlands, Belgium, France, Spain, Sweden, USA, Australia.

In preparation: Korea, Mexico, Brazil, Argentina

Member of Netzwerk ZENIT e.V.: Since 1994

Business field: Linear and automation technology

Clients: Audi, BMW, Daimler, Ford, Jaguar, Seat, VW

Special expertise: High-precision and flexible gear rack lift drives

Interested at international level in:

- Partners for research projects
- Distribution partnerships
- Technology cooperation

Outlook: „With its new modular system, Leantechnik has created an innovative product which more than satisfies growing demands in the area of mechanical engineering. This innovation will also help to open up new sectors. After all, we are not just diversifying in terms of products but also into other markets and industries. Examples are our close cooperation with Frankfurt Airport and partnerships with companies in the plastics industry. We are also planning to diversify into the packaging industry, positioning technology and GFRP engineering and manufacturing.“ Reinhard Janzen

Lenord + Bauer. **Successful worldwide with “Made in Germany”.**

For over four decades, the name Lenord + Bauer has stood for the automation of industrial motion processes. The firm, which was founded in Oberhausen in 1965, develops, manufactures and supplies magnetic sensors for the measurement of rotating and linear motion, as well as intelligent control and drive systems.

Special product features

Thanks to their rugged construction and specifically selected technologies, the controls and magnetic sensors can withstand even the toughest demands on shock, vibration and temperature resistance. Typical areas of application are therefore rail vehicles and wind power plants. But manufacturers of machine tools also appreciate the precision of Lenord + Bauer’s high-resolution sensors. MiniCODERs are the top-selling encoders worldwide for speed/position measurement in high-speed spindles. As a further pillar of the business, the company extended its product range in 2010 to include a mechatronic system solution. The PowerDRIVE system comprises a drive device and a decentralized control unit. This multiprocessor



solution can be directly integrated into the plant control system via a fieldbus module. It replaces with great efficiency the conventional hand wheel, which must be adjusted manually with each change of format on a production line. The PowerDRIVE system has just recently been voted one of the 100 most innovative automation products of the year by a trade magazine.

A large number of the products supplied by Lenord + Bauer are client-specific solutions. The company consciously focuses on the Ruhr region, a high level of vertical production and the detailed market knowledge of its long-standing employees. In this way, products can be adjusted to customer-specific requirements much faster than would be possible with manufacturing or development facilities abroad.



■ *“Many of our customers are global players. That’s why it was important for us from the outset to take care of them beyond Germany’s borders too. Nevertheless, we have noticed that “Made in Germany” quality is a significant success factor for us both at national as well as international level.”*

Hans-Georg Wilk, Managing Director, Lenord + Bauer

Set for growth

Each year, Lenord + Bauer invests over 15 percent of turnover in the development of new innovative products for its different target groups. Design, electronics and software development work hand in hand. With success: The firm continues to grow at above the average rate in the sector. Today, it employs about 200 people and has sales and distribution partners in 21 countries. Due to the considerable demand from Asia, the firm set up its own subsidiary in Shanghai at the beginning of 2011. Further sales offices are planned. But in future too, product development and manufacturing will continue to take place exclusively in North Rhine-Westphalia.

Its business strategy of "Made in Germany", combined with a powerful international distribution network, is paying off. Manufacturing is reaching its capacity limits. That's why Lenord + Bauer is building new production facilities covering 5.500 m² in neighbouring Gladbeck, in order to make space for further growth. Manufacturing and production-related departments will in future be located at the new premises. Logistics and manufacturing account for about 90 percent of the overall floor space, the rest is divided between offices, social facilities and meeting rooms. Production will move in at the beginning of 2012. The firm's headquarters in the Königshardt area of Oberhausen will be maintained and used permanently by the development, sales and administration divisions.



Lenord, Bauer & Co. GmbH

Dohlenstraße 32
D - 46142 Oberhausen
Telephone: +49 - 208 - 9963 0
Email: Info@lenord.de

Year founded: 1965
No. of employees: 208 (Stand 08.2011)
Turnover 2011: 25 million Euro
Foreign share of turnover 2011: About 30 %

Presence in foreign markets: Representative office in Shanghai, sales and distribution partners in 21 countries.

Member of Netzwerk ZENIT e.V.: Since 1984 (founding member)

Business field: Automation systems for industrial motion processes

Clients (extract): Wind: Moog, SSB, Goldwind, RePower, Rail: Siemens, Bombardier, Alstom, ABB, VTG, Mechanical engineering: Gildemeister, Niverplast, Racupack, etc.

Special expertise: Client-specific solutions for the toughest demands on shock, vibration and temperature resistance

Interested at international level in:

- Partners for development projects
- Sales and distribution partnerships
- Cooperation with technology partners

Outlook: "To be permanently successful, you need intelligent products. That's why our level of investment in the area of research and development is correspondingly high. At the moment, we are in the process of expanding our product range to include a mechatronic system solution, which replaces the hand wheel conventionally used in format adjustment on production lines. The fully automatic PowerDRIVE system has already been voted one of the top 100 most innovative automation products of the year. So I'm looking quite calmly into the future." Hans-Georg Wilk

Menerga. **Technology leader in efficient air-conditioning.**

Mülheim-based Menerga is an internationally leading innovator in the ventilation and air-conditioning sector. The firm's philosophy is founded on the principle of sustainability. That's why the focus is on products which, as a holistic solution, demonstrate the lowest possible energy consumption.

When it was established in Mülheim an der Ruhr in 1980, the starting point for Menerga was a group of experienced engineers, technicians and sales personnel. The purpose of setting up the company was to offer energy-efficient, plug-in air-conditioning equipment for indoor swimming pools, which can be flexibly configured to fit the requirements of the building in question. As it became more and more established in the marketplace, Menerga successively expanded its product range to include the product segments of ventilation and air-conditioning as well as process and climate cooling. Today, over 600 people work for Menerga. All systems are produced in accordance with individual customer specifications in Mülheim an der Ruhr. About 70 % of the equipment is manufactured for the ventilation and air-conditioning division, whilst air-conditioning for indoor swimming pools makes up about 30 % of the business.

Growth and internationalization

The model for the development of new appliances is nature with its numerous and varied solutions, which as far as possible are transformed into technical processes. For example, amongst the newest innovations are air-conditioning appliances with adiabatic evaporation cooling or sorption-supported air conditioning. These are supplemented with space-saving compact chilled water units and systems for the simultaneous production of hot and cold water. In 2010, pace-setting air-conditioning systems were developed for the energy-saving cooling of large computer installations. Depending on what is required, Menerga air-conditioning equipment works with high-performance recuperative or regenerative energy recovery.

Menerga recognized with foresight the global significance of energy-saving air-conditioning technologies and attached great importance from early on to an international presence in the demand markets. The broad range of individual appliance configurations demanded a high level of technical skills from sales personnel. With these skills and its market closeness, the firm gained a reputation for itself at international level as innovators in the air-conditioning segment. In the meantime, over 300 employees in service and sales are working for Menerga throughout Europe



in 25 countries. With about 45 percent, exports are an important pillar of the firm's business.

A large number of excellent reference projects substantiate the wide variety of possible applications for Menerga's equipment concepts and their different ways of working. Amongst the highlights are the highest lying submillimetre observatory in the world in the Chilean desert, where Menerga appliances, under extreme temperature fluctuations, winds and storms, are responsible for air-conditioning and temperature control in the highly sensitive receiver cabin. Another example is the Belgian Princess Elisabeth zero emission research station in the Antarctic, where Menerga equipment makes a significant contribution to reaching the passive house standard. Key factors here are the high degree of heat recovery as well as the conditioning of air humidity. Two further outstanding projects – the Menerga administration building and a shopping mall – have been realized in Maribor, Slovenia. The buildings were both awarded the GreenBuilding Award for their energy-saving equipment and design.



Menerga GmbH

Gutenbergstraße 51
D - 45473 Mülheim an der Ruhr
Telephone: +49 - 208 - 99 81-0
Email: info@menerga.com
Internet: www.menerga.com

Year founded: 1980

Presence in foreign markets: Austria, Belgium, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Great Britain, Greece, Hungary, Italy, Latvia, Luxemburg, Netherlands, Norway, Poland, Russia, , Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland.

Awards: Annual GreenBuilding Award 2008 for Menerga Slovenia's new energy-efficient administration building in Maribor.

Annual GreenBuilding Award 2011 for the air-conditioning system in the Mercator Pesnica shopping mall in Maribor.

Member of Netzwerk ZENIT e. V.: Since 2010

Business field: Manufacturer and supplier of complete and highly efficient ventilation, air-conditioning and cooling equipment.

Special expertise: Customer-oriented and high-performance energy-saving ventilation and air-conditioning technology, strong innovation capability

Interested at international level in:

- Partners for research projects
- Sales and distribution partnerships
- Technology cooperation

Outlook: We will be further strengthening our current course of growth through a large number of product innovations. The international market forms an important basis for this.

Powitec. Tackling emissions worldwide with software.

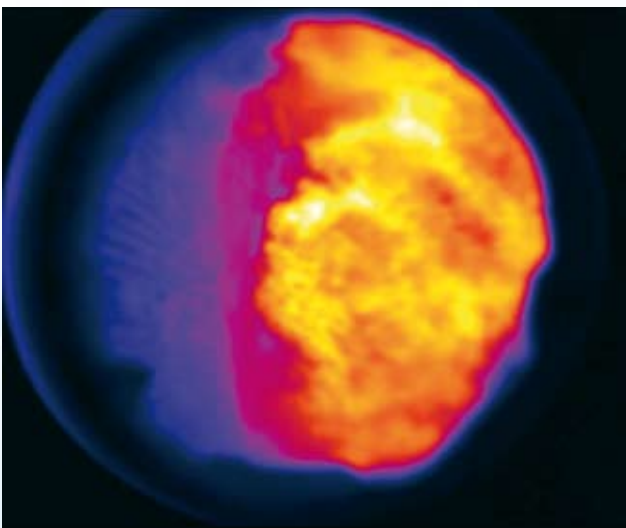
With intelligent software, Powitec Intelligent Technologies GmbH from Essen has grown into a technology leader in the development and installation of intelligent control systems for the automation of complex industrial processes.

Every success story starts with a good idea – and people who believe in it. The idea: to raise perceptibly the energy efficiency of industrial processes. With a process, which when Powitec GmbH was set up in 2001, only existed on paper.

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Special product features

The result of intensive research is called PiT Navigator, a software system developed together with the Technical University of Ilmenau, which analyses, controls and improves the combustion process in industrial furnaces. Like an autopilot. The people who believed in it from the start are the two managing directors, Bernd Beyer and Franz Wintrich. Dynamic control systems for the automation of complex production processes have since been inseparably linked to the company's name: Powitec. Process Optimization with Intelligent Technologies. "The Navigator is intelligent because it is self-learning.



That means it can adjust itself to changing parameters in different plants", explains engineer Franz Wintrich, not without some pride. If the system registers a deviation, it actively intervenes and optimizes the combustion process by controlling the fuel/air ratio. And this helps the customer to reduce energy consumption and emissions and thus save real money.

International orientation

As a global technology leader, Powitec today bundles the know-how of over 40 specialists, in particular software developers and process engineers. Some 30 employees are based at the firm's headquarters in Essen, ten are working in the software house in Ilmenau. The customer base is made up of companies in which even minor process improvements can lead to savings of several hundred thousand Euros per year: Power stations, waste incineration plants, as well as the cement and lime industry. "About 70 % of our turnover is generated abroad", says commercial expert Bernd Beyer, whereby the most important growth markets are India, China, Brazil and Malaysia. Powitec's intelligent process optimization systems are today installed in over 150 locations in 40 countries. Global use of the PiT Navigator would mean a reduction in energy-related CO2 emissions worldwide by one percent. What at first doesn't sound much equates to total energy-related CO2 emissions in Germany.

With the support of a worldwide sales and distribution network, Powitec's technology has developed in the recent past into a global success story. Thus the firm succeeded in installing reference plants at leading enterprises in its target markets, in raising its turnover to 4.0 million Euros and opening up new sales markets with potential worth billions. Bernd Beyer is also positive about Powitec's future development. "We have established a technological edge of about four to five years. So that we can increase our lead

still further, we will be working closely together in the future as well with the Department of Neuroinformatics and Cognitive Robotics in the "Faculty of Computer Science and Automation" at the Technical University of Ilmenau. And come closer to our goal of occupying a place as one of the top three suppliers worldwide of these intelligent automation systems."



■ *"For us as a small company, successful B2B sales to demanding plant operators can only work with very good local support. Our products are not suitable for typical hawking sales organizations, but instead require qualified door openers."*

Powitec Managing Director Bernd Beyer

powitec

Powitec Intelligent Technologies GmbH

Im Teelbruch 134b
D - 45219 Essen
Telephone: +49 - 2054 - 937 62-0
Email: info@powitec.de
Internet: www.powitec.de

Year founded: 2001
No. of employees: 40
Expected turnover 2011: 4 million €
Foreign share of turnover: About 70%

Presence in foreign markets: Australia, Brazil, Bosnia, Croatia, Greece, India, Indonesia, Iran, Italy, Poland, Serbia, Slovenia, Spain, Malaysia, Saudi Arabia, Turkey, USA

Patents: 80 granted international patents and 15 in the application phase

Awards (optional):

- 2010: "German Climate and Environment Prize" of the federal government in the category "Outstanding and Sustainable Technologies"
- 2009: Nominated for the Grand Prize for Small and Medium-sized Enterprises
- 2002: Innovation Prize of the Netzwerk ZENIT e.V.

Member of Netzwerk ZENIT e.V.: Since 2002

Business field: Advanced Process Control

Clients: Power stations, cement factories, waste incineration plants, operators of complex industrial plants

Special expertise: Fully automatic optimization solutions which adjust themselves to parameter changes

Interested at international level in:

- Partners for research projects
- Sales and distribution partnerships
- Technology cooperation

Outlook: "Environmental protection and the efficient use of limited resources are two of the greatest global challenges. They also offer sustainable growth potential for Powitec: Our software helps operators of coal-fired power plants and cement furnaces worldwide to lower emissions - and save costs at the same time. Globally increasing emissions limits, e.g. for CO₂ and NO_x, as well as rising fuel costs raise the demand for Powitec solutions. And these secure operators a very attractive return on their environmental investment". Bernd Beyer

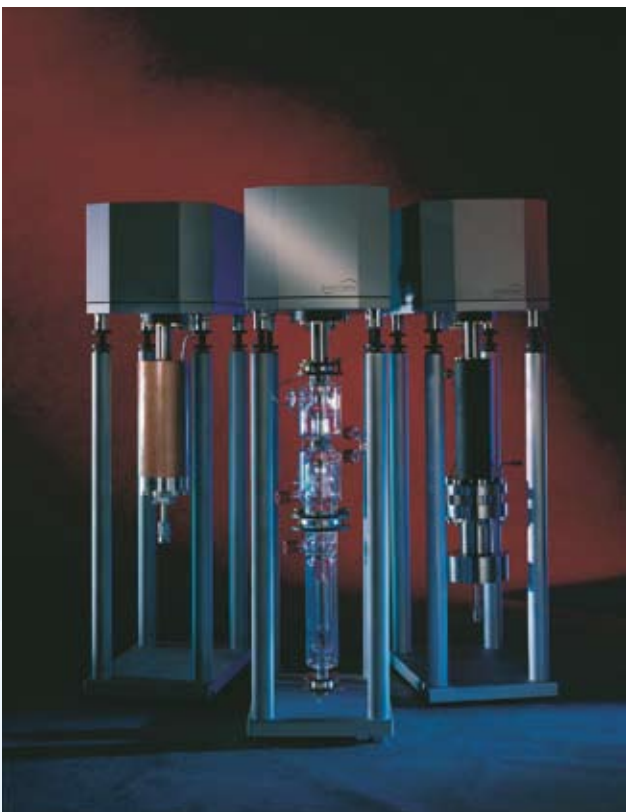
Rubotherm. **Conquering the market with a niche product.**

Rubotherm GmbH in Bochum has been developing, manufacturing and distributing measuring instruments and laboratory equipment for process engineering since 1990. The focus lies on gravimetric measuring processes to record mass changes under controlled ambient conditions.

There is no way round highly specialized analysis equipment for anyone who, as a researcher or product developer in the area of materials science, physics and chemistry, is interested in the continuous weight measurement of a sample under controlled atmospheres and programmed temperatures. Such equipment also includes the magnetic suspension balances from Bochum, which guarantee precise measurements under high pressure and extreme

temperatures. The global market volume for these high-tech devices is about 40 units per year, so the firm's founders were well aware from the outset of the need for international activities. The niche product character and the relatively high price of the balances mean that both clients from the public-funded research sector as well as from industrial research must budget for their purchase. Due to the partly very long acquisition times as a consequence, it seemed to make sense to be present in as many markets worldwide as possible, whereby all were in agreement that growth in new markets is dependent above all on cooperation with suitable partners. After all, it is important that a technically sophisticated and complex product with an average cost of 120.000 Euro be marketed in the right target group.

In 1995, the company found an ideal partner in a highly industrialized market in the shape of the Japanese firm BEL-Japan, Inc. Contact had been made by the Japanese, who manufacture products which are similar yet less efficient in the case of extreme process conditions. How successful this partnership has been for both sides up until today is substantiated by the fact that since 2004 Rubotherm is responsible for the sale and distribution of BEL equipment in the German market. Rubotherm is highly successful at international level through its extensive network of distributors, particularly in Asiatic countries such as China, Korea and Japan. In parallel, a strategic review of the European market was undertaken. After partnerships had already been established at the beginning of the 1990s with individual distributors in Europe, the priority in the middle of the decade was above all to find partners throughout the whole of Europe and worldwide. A project run by ZENIT and co-financed by the EU and the state of North Rhine-Westphalia proved helpful, which supported small and medium-sized enterprises in gaining easier access to growth markets. Initial market research centred on an analysis of the competition and their activities in Rubotherm's envisaged target markets, which indicated directly and indirectly who might be potential sales and distribution partners. Thanks to the project, new partners in Europe, and especially in eastern European



countries such as Poland and the Czech Republic, could be attracted, with whom Rubotherm is in some cases still working today. In 2010, the year of the company's 20th anniversary, Rubotherm NA, LLC was founded, the firm's own business in the USA.

Rubotherm is active at international level in the field of research too: For example as coordinator or participant in EU projects in the Seventh Framework Programme for Research and Technological Development. Thus, for example, work was undertaken on the development of a new type of gas sensor, which can be used in biomass and coal gasification. This project in the area of alternative energy generation was initiated together with a Dutch university.



■ *"ZENIT's support in the analysis of our target markets and the search for technology partners in Europe has always been a great help. Today we can read off measurable success in many different areas."*

Dr. Frieder Dreisbach, Managing Director, Rubotherm GmbH



Rubotherm GmbH

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Email: info@rubotherm.de
Internet: www.rubotherm.com

Year founded: 1990
No. of employees: 41
Turnover 2011: 5.5 million €
Foreign share of turnover: 65%

Presence in foreign markets:
Global distributor network, own firm in USA

Patent: Magnetic Suspension Coupling

Member of Netzwerk ZENIT e.V.: Since 2000

Business field: Scientific measuring instruments

Clients: Laboratories in industry (30%) and research (70%), chemistry, process engineering

Special expertise: Technical processes can be examined under extreme process conditions (high pressure and temperature conditions) in the magnetic suspension balance.

Interested at international level in:

- Partners for research projects
- Sales and distribution partnerships
- Technology cooperation

Outlook: "We are continuing along our path of growth towards a secure future. The reasons for this lie in the consistent further development of our products, our broad-based position in various international markets, and our motivated and well-qualified team." Dr. Frieder Dreisbach

Hans Turck. **Internationalization safeguards sustainable growth.**

Turck is amongst the global leaders in the field of industrial automation. With over 3.000 employees in 27 countries as well as agencies in a further 60, Turck automation specialists are represented throughout the world.

Turck is a family-owned business which offers efficient solutions for production and process automation with about 15.000 products in the areas of sensor, fieldbus, connector and interface technology, as well as Human Machine Interfaces (HMI) and RFID technology. Amongst its clients are automobile manufacturers and suppliers, as well as mechanical engineering companies, manufacturers and plant operators in numerous other sectors.

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Company history

To become the global player it is today, Turck laid the groundwork from an early stage. As early as 1973, less than ten years after the company was launched, the first subsidiary was opened in the USA, the largest automation market in the world, and for 17 years Turck has been active in the Chinese market with its own distribution and manufacturing company. With Germany, the USA and China, in the mid 1990s the company was already covering almost 65 percent of the world market potential for automation technology and had established such a sound footing that it has long been market leader in the USA in the areas of inductive sensor technology and connection technology.

■ *“To internationalization, which constantly secures double-figure growth rates for Turck, there is no alternative. In Germany we must reposition ourselves again and again and be more and more intelligent in order to survive in the global market in future as well. And we have proven convincingly over the past decades that this is not just wishful thinking.”*

Christian Wolf, Managing Director, Hans Turck GmbH & Co. KG

Today, Turck has its own agencies in 20 of the 30 countries with the highest GNP. Around 80 percent of turnover is generated abroad, whilst 80 percent of manufacturing takes place in Germany and Switzerland. This shows how employment can be created in Germany with a solid internationalization strategy. In order to continue to achieve sustainable two-figure growth, Turck is pursuing this internationalization strategy further, with a focus above all on emerging markets and the BRIC countries (Brazil, Russia, India and China).

When defining potential target countries in which to establish own subsidiaries, several factors always play an important role: Right at the top of the list is naturally the possible volume of turnover, which can be estimated from industrial GNP, expected growth and appropriate target sectors. After that, further questions need clarifying, such as the competitive situation and potential key customers, but also political, security and ethical aspects. Once all the boxes are ticked, it is simply a matter of the “ease of doing business”, i.e. business operations in the target country which run as smoothly as possible.





Hans Turck GmbH & Co. KG

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 Email: more@turck.com
 Internet: www.turck.com

Year founded: 1965

No. of employees: Over 3.000
 Turnover 2011: About 430 million euro
 Foreign share of turnover: About 80 %

Presence in foreign markets: Australia, Austria, Bahrain, Belgium, Brazil, China, Czech Republic, France, Great Britain, Hungary, India, Italy, Japan, Mexico, Netherlands, Poland, Romania, Russian Federation, Singapore, Sweden, Turkey, USA

Member of Netzwerk ZENIT e. V.: Since 1991

Market and customer proximity as success factors

The motto "think global – act local" is as old as it is true. A successful global internationalization strategy can only work if it does justice to local requirements when implemented. The key to this is distinct market and customer proximity. That's one of the reasons Turck is market leader in the USA, because from the outset selling was the job of established sales channels there and not – as usually the case – done via direct sales. In China, on the other hand, where system integrators were not widely available, the same customer proximity is achieved with numerous own sales offices, so that Turck occupies a leading position in the market of the "Middle Kingdom" with a large number of its own sales offices.

Business field: Automation engineering – Sensor, fieldbus, connection and interface technology, RFID and HMI/PLC solutions

Clients: Automobile manufacturers and suppliers, as well as mechanical engineering firms, manufacturers and plant operators in numerous other sectors in the manufacturing and processing industry

Special expertise: Automation solutions tailored to client and application requirements

Interested at international level in:

- Sales and distribution partnerships
- Technology exchange

Outlook: "In 2011, we exceeded our ambitious goal and generated a group turnover of about 430 million euro. To achieve this, we must continuously make all sorts of adjustments and consistently progress from being a supplier of components to a provider of solutions. This includes, amongst others, defining solution portfolios for specific regions, sectors and applications with the corresponding sales and distribution routes, reduction of complexity by means of modularization and platform development, as well as defining appropriate price systems for system solutions and services." Christian Wolf

A powerful federal state

North Rhine-Westphalia. **From black coal to white collar growth.**

Bordering on Belgium and the Netherlands, North Rhine-Westphalia is located in the heart of Europe.

The state was established in the framework of the British military administration's "Operation Marriage" in August 1946, the marriage being the uniting of the two regions of Westphalia and the Northern area of the Rhine province, both former parts of Prussia. This was the birth of what is now the most densely populated and populous of Germany's 16 states: With almost 18 million inhabitants about the same size as the Netherlands.

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As Germany recovered from the Second World War, the Ruhr region became one of Europe's key industrial regions and made an important contribution to Germany's "Economic Miracle". In the 1950s and 1960s, smog, soot and slag characterized the landscape as North Rhine-

Westphalia became known as the land of coal and steel. Over the ensuing decades, tough crises in these sectors led to a shift in the economy away from heavy industry towards production-oriented services and the former coal mines have been transformed into chic workplaces for the creative professions. A strong service sector has evolved – over 70 % of the region's economic output is generated by service providers, with industry-related services playing a particularly important role.

30 of Germany's 80 largest cities are located here, including Cologne and Essen. Almost 150 million people live within about a 500-kilometre radius of Düsseldorf, the state capital. This represents a third of all consumers and 45 % of the purchasing power in the European Union. In terms of Germany's GDP, NRW generated 21.7 % in 2010, ranking it top of all federal states. 16.6 % of German exports are „Made in NRW“ and 19 of the 50 largest companies in Germany have their headquarters here (e.g. Bayer, Deutsche Telekom, E.ON, Metro, Rewe, RWE, ThyssenKrupp).

NRW's economic backbone is however the over 760,000 SMEs which employ 80 % of the workforce – the hidden champions presented in this brochure are amongst them.



ZENIT GmbH, founded in 1984, is a Public Private Partnership with around 50 employees. Shareholders are

- **Netzwerk ZENIT e.V., an association comprising some 200 enterprises**
- **The State of North Rhine-Westphalia**
- **A consortium of banks**

Areas of specialisation

- **Europe**
- **Funding**
- **Technology and Innovation**

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