FIVE DECADES OF LIFE WITH THE “V”
A generations-old success principle

50 years of VEGA – 50 years of precision work. Already during the first years of the company, VEGA employees worked with passion on level measurement technology, which was still a young science back in those days. Today they develop and produce modern, high-precision measuring instruments with the same passion. Here in the Black Forest, the home of VEGA, one principle has always applied when it comes to inventions: if they are to gain acceptance, they have to be useful, effective and reliable. This principle has brought success in the Black Forest for centuries. And at VEGA for five decades. We’ve had a part in making the term “Black Forest precision” a concept known to the whole world. We’ll make sure that it stays that way.

Jürgen Grieshaber
Managing partner
LEADERSHIP WITH A FINE TOUCH

Decisions based on sound judgment

Leading a company requires professionalism, diligence, intuition and a sense of responsibility every single day. Since the founding of the company 50 years ago, three criteria have always been the basis for decisions in the family-owned VEGA: the welfare of all employees, a firm commitment to the location and a social involvement that goes far beyond the economic business objectives. For managing partner Jürgen Grieshaber and the managing directors Günter Kech and Rainer Mielke, it’s a road that is, at the same time, the destination.

Thinking freely. Being sure.

Whoever puts his creativity to work to create something new needs two things: freedom and certainty. The freedom to think and the certainty that one’s own livelihood is still assured the next day, too. This allows ideas to flourish at VEGA. With this, the company still follows today the example of a passionate entrepreneur who knew well the creativity-promoting effect of freedom and certainty. His name was Bruno Grieshaber. He founded VEGA 50 years ago.

People count

Why do some companies have more success than others? The answer: It’s the people that make the difference, not the machines. Managing director Jürgen Grieshaber is convinced: “VEGA is made up of the people who work here.” If these people feel well and complete, a success team that is much more than the sum of its parts comes into being.

We’re staying here. That’s a promise!

Sustainability means having a lot of endurance and simply letting some trends pass by. While in other companies the moving crates were being packed, VEGA was investing consistently in the employees in Kinzigtal. This interpretation of the word “family-owned company” has always paid off for VEGA and it’s going to stay that way; also in the future, VEGA will be concentrating on the healthy development of the company in Schiltach and on the welfare of its employees there. In this way, VEGA is strengthening the location that makes VEGA strong.

Because life depends on it

It’s not only commercial success that depends on the reliable and accurate functioning of VEGA instruments, but often the well-being of man and the environment as well. In conjunction with chemical processes, for example, or with water supplies or energy generation. All our employees are aware of this responsibility and do all they can every day to fulfil it.

Good manners

VEGA develops instruments that communicate with people. Of course, communication between employees also has a special status in such a company. Department-spanning, open information and personal talk are considered good etiquette at VEGA. The result: a harmonious team of employees who trust each other.
Success grows from good ideas. But if it’s going to last, it needs room, time and staying power.
**V E R S A T I L I T Y**

**THE MEASURE OF ALL THINGS**

On land, the high seas and in the air

VEGA instruments are the measure of all things – on land, the high seas and in the air. Measurement technology from Schiltach sees to it that everything runs smoothly in the food and beverage sector, in water supply and sewage systems and even in the pharmaceutical industry. VEGA technology supports energy generation and environmental engineering, it is also implemented in the production of paper and metal. Important duties are demanded of the instruments in the cement industry, the building-materials industry, as well as the chemical and petrochemical sectors. VEGA sensors and signal conditioning instruments can be found even in aeronautics and marine industries: in aeroplanes, on tankers, freight and passenger ships, and on offshore platforms.

**Completely adaptable**

Each industry has its own specific demands on the measurement technology it uses. The instruments must be insensitive to heat and cold, cope with aggressive substances and withstand intense shocks and vibration. Sometimes a VEGA instrument must even deal with a combination of different challenges at the measuring site. That’s why VEGA has come up with a modular instrument system. Thanks to it, each instrument can be perfectly adapted to the respective conditions of the application.

**Consultation: fast and good**

The VEGA service employees know a lot about the industries in which VEGA equipment is used. They go to great lengths to make sure the instruments yield the highest measure of that operational safety and measuring precision they are known for. VEGA customers get quick, competent consultation round-the-clock and anywhere in the world.
Cool precision in hot media

Whether jam or flour, plastic or varnish: almost every product today is industrially produced in large quantities. Highly automated processes make for productivity and quality. The reliability of the implemented technology is the most important factor. In the last 50 years, the precision and durability of VEGA technology has made the company one of the worldwide leading manufacturers of instruments for level, limit level and pressure measurement.

VEGA sensors and signal conditioning instruments can be found everywhere where precise data about the quantity of gases, liquids or bulk solids are needed. Sometimes they have to withstand the toughest conditions imaginable because the measured media are often corrosive, highly abrasive, under high pressure or extremely cold or hot.

Level measurement

Radar
The measuring instrument sends out short microwave pulses in the direction of the medium and thus measures the distance to the surface. Advantage: the measurement is not affected by temperature, pressure or product properties.

Ultrasonic
This instrument emits ultrasonic pulses in the direction of the medium, which reflects them. The time required for the signals to get back to the sensor varies depending on the level. It’s the ideal solution for simple standard applications.

Guided microwave
Microwave pulses are guided along a rod or cable probe and reflected by the product surface. The probe ensures that the signal reaches the medium undisturbed.

Capacitive measurement
The rod or cable probe and the vessel wall form the two electrodes of a condenser. When the level of the medium changes, the electrical capacitance between the electrodes also changes.

Level detection

Vibrating level switch
The vibrating level switch has a vibrating rod or tuning fork that is made to vibrate. When the vibrating element comes into contact with the medium, the vibration changes and the device issues a switching command. An extremely versatile technique.

Capacitive level switch
Sensor and vessel form the two electrodes of a condenser. When the level of the medium changes, the electrical capacitance between the electrodes also changes. From this the sensor electronics deduces when the defined level is reached. A robust technology for applications in which heavy buildup makes measurement difficult.

Microwave barrier
The microwave barrier works like a light barrier: when the medium crosses through the microwave beam between transmitter and receiver, the signal is damped. Advantage: contactless and insensitive to fouling.

Pressure measurement

Process pressure measurement
Measuring cells detect the pressure in pipes or closed vessels. Here, the deflection of a diaphragm is converted into a measurement signal.

Hydrostatic pressure measurement
A measuring cell at the vessel bottom detects the small changes in hydrostatic pressure that result from a rise or fall of level.

Differential pressure measurement
Detecting pressure differences with differential pressure measuring cells is a versatile method for level measurement in vessels with superimposed pressure, for flow-rate measurement in pipes and for filter monitoring.
The birth of radar level measurement

Radar has revolutionized level measurement. Already in the early 1970's, the petrochemical industry used the first radar sensors for level measurement in large storage tanks. But this measuring technique required tremendous engineering effort and was not cost-effective enough for use in process automation. That's why in 1989 VEGA started working on a radar instrument with pulse technology, the first company to do so. Two years later VEGA introduced to the world the first pulse radar level gauge ready for mass production. This was the starting signal for the worldwide triumph of radar measurement in process engineering.

The most successful level radar in the world: eric®

Shortly before the beginning of the 21st century, one name was the talk of the town among experts: eric®. That was the name of the world’s first 2-wire radar instrument, which VEGA launched on the market in 1997. eric® gave level measurement technology a completely new face. It was equipped with a digital signal processing system that was quite unique due to its very low energy requirement. And on top of that, the little instrument with the pleasant human features proved to be a real all-rounder: its fields of application extended from the chemical industry to food production to the level measurement of liquid steel. In short: many industries were just waiting for something like eric® to come along. So they deployed eric® in numerous applications where the use of radar had been technically unfeasible or too expensive until then. eric® thus brought VEGA to the top of the world market within a very short time.

A move into bulk solids applications

But eric® also had his limits: the application area of radar level measurement was still limited mainly to liquids. In short: many industries were just waiting for something like eric® to come along. So they deployed eric® in numerous applications where the use of radar had been technically unfeasible or too expensive until then. eric® thus brought VEGA to the top of the world market within a very short time.

VEGA engineers developed new, powerfully focusing horn and parabolic antenna systems to enable measurement in narrow and very tall silos. At the same time, the signal processing was adapted to the typical features of bulk solids containers. Thus equipped, the radar sensors were well prepared to deal with the extremely difficult process conditions in the bulk solids industry: pneumatic filling, dust, noise, buildup and steep repose angles were suddenly no longer a problem. Where other measuring techniques showed considerable weaknesses, the radar sensor VEGAPULS 68 ushered in a brand new era in bulk solids measurement. In 2007, the sensor got backing from its little brother VEGAPULS 67. Together, they are an unbeatable team ready to take on any challenge in the area of bulk solids.

Success story

VEGA is proud of its pioneering role in radar measurement technology, which is documented by an impressive number: today, 18 years after the introduction of the first VEGA radar measuring instrument, over 200,000 radar sensors from VEGA are at work in all kinds of level applications worldwide.
Whoever understands how to unite the powers of man and technology, creates technology for people.
VEGA's success engine

The development department is always the engine of success at VEGA. Indeed, it is the heart of the company. Here, people work with imagination. They have a vision, are rich in ideas and have at their command the technical know-how for transforming those ideas into new technologies. The number of the employees in this area shows the importance VEGA places on development: over 70 engineers, technicians and designers do fundamental research here and work meticulously on the development of electronics, hardware and software. VEGA relies specifically on experts: in the department there are specialists from many different fields, such as high-frequency engineering and circuit board design, fieldbus communication or measuring and test equipment construction. This investment in a strong development department pays off: VEGA applies for a large number of invention patents every year.

Latest technology

The development department is a place where world-class technology is created. Every VEGA sensor began here as an idea. Here, where benchmarks are both used and created, first-class equipment is the key to success. VEGA doesn’t pinch pennies when it comes to providing the specialists with the latest measurement technology: spectrum analysis instruments, sampling oscilloscopes, high-frequency generators and simulation programs – on average the company invests a six-digit sum in the equipment for one single workplace in R&D.

The radar measuring track

VEGA spares no effort to achieve the highest possible precision: the company has its own 32 metre-long measuring track on which radar, ultrasonic or guided microwave sensors can be calibrated. The development department runs test series here and also makes test protocols for customers. The insulated room is lined with special insulating material that avoids interfering reflections by absorbing sound and microwaves. A laser interferometer measures the distance to the reflector plate, which is positioned so precisely by a stepper motor that the tolerance is practically zero.

Each instrument a unique model

The standard production lot size at VEGA is 1. How does this work? It’s quite simple: VEGA’s product range encompasses 300 basic instruments. After an order is received, the instrument is assembled from individual components exactly according to customer specifications, complemented with additional functions and precisely adapted to its respective area of application. Thousands of instrument versions are thus created and each one is a unique, custom-made article.

Quality signed and sealed

VEGA gauges are reliable, also with respect to functionality and safety. And VEGA does not just claim this – it has it certified in writing: all of its instruments pass through extensive approval processes. Testing laboratories issue a certificate only when all quality standards are fulfilled. Whoever receives these worldwide certificates, like VEGA does, has accomplished a lot. Because requirements vary greatly from country to country.
Winning ideas

Why is VEGA successful? Very simple: VEGA thinks ahead. Technology is there to serve people – not the other way around. That’s why VEGA is always on the lookout for ways to make technology even better. Lots of ideas are produced this way. And some of them are simply brilliant. Such as the idea behind plics®.

The modular system

The plics® concept is actually very simple: each instrument is assembled from prefabricated individual components only after an order is received. This modular principle gives VEGA customers complete flexibility when they’re selecting different sensor features. They get custom-made, user-friendly equipment in an amazingly short time. And best of all: these instruments are more cost-effective in every respect – throughout their entire life cycle.

Easy is better, everywhere!

People like technology if it makes life easier for them. With plics®, measurement technology becomes almost child’s play: from selecting and ordering to installing and commissioning, right through to maintenance and service. VEGA has consistently thought through this “easy is better” concept of plics® all the way to the end. Level, switching and pressure: plics® solves the most demanding measurement problems in almost any environment.

The modules

Every instrument from the plics® series consists of five modules: a sensor is connected via a process fitting to a housing of plastic, aluminium or stainless steel. Therein lies the heart of the instrument: an individually programmed electronics module. The head of the instrument is always the same indicating and adjustment module. So anyone who has once operated a particular plics® measuring instrument can operate all other plics® devices.

VEGA THINKS AHEAD.
THE RESULT: PLICS®.
CLEARLY STRUCTURED
TECHNOLOGY, EASY TO USE.

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TECHNOLOGY, EASY TO USE.
After the fully automatic optical inspection, it is again people who put every circuit board through a function test in order to guarantee absolute perfection. Only then do the circuit boards get a protective coating, making them ready for use. Now things can go on to final assembly.

Production of level sensors

Whether the measuring instruments operate with radar, ultrasonic or guided microwave: in the production of level sensors, the workers first fabricate the individual instrument components. Only when an order comes in do these individual components become a customer-specific instrument, complete with suitable electronics and the plastic, stainless steel or aluminium housing chosen by the customer.

There are of course special features in every production area: for example, the antenna systems of the radar sensors are checked one by one for their signal strength and reflection characteristics. Only antenna systems that satisfy the high quality requirements are released for further production.

The tubes and cables of the guided microwave sensors, which serve as waveguides, must also be assembled. Extremely high precision is required: cutting the cables to length is carried out to a tolerance of under one tenth of a millimetre.

Couplings and process fittings, such as flanges, are also individually combined and welded together for every order. The welded joints must pass different tests, depending on the operating conditions that await the sensor, before they are released for use. These tests extend from dye penetrant tests to complex X-ray inspections.

Before being delivered to the customer, every instrument undergoes a final calibration, to adapt the electronics to the individual instrument version. The sensor features are programmed to match the special sensor type. Finally, the finished instrument is subjected to a complete function test.

Electronics production

The electronics module, the mind of every measuring instrument, is the part that controls everything. It is therefore understandable that VEGA manufactures its own electronics. Man and technology work hand-in-hand in the electronics production: high-tech machines take over the work that requires highest precision and speed. But where touch and human understanding are required, people have to take over. This way, a good rapport is established: in electronics assembly, soldering paste is applied to the circuit boards in a screen printing process. The circuit boards are then assembled by a positioning system in a pick-and-place procedure in two SMD lines. Assembly time amounts to just 0.12 second per component, which allows 30,000 tiny components to be mechanically placed every hour.

After the fully automatic optical inspection, it is again people who put every circuit board through a function test in order to guarantee absolute perfection. Only then do the circuit boards get a protective coating, making them ready for use. Now things can go on to final assembly.
As soon as the pressure transmitters are completed with their metallic or ceramic measuring cells, they are calibrated on the characteristics test bed and placed in a conditioning cabinet for temperature compensation, where they have to endure temperatures up to 100 °C. Only after this is the pressure transmitter equipped with the requested housing and electronics. Cable assemblies are encapsulated to optimally protect the pressure measuring cells against penetrating liquids, dust or gases.

Production of pressure transmitters

Different pressure measuring cells are used in the pressure transmitters depending on the area of application: there is either a ceramic measuring cell which is connected to the process fitting via a seal or a metallic measuring cell which is laser welded directly to the process fitting. Ceramic measuring cells are extremely sensitive high-tech products which must not be contaminated by dust particles during production. That's why the so-called CERTEC® measuring cells are printed and burned under “clean room class 100” conditions in thick layer technology. Highest precision is required: measuring is carried out here to a accuracy of one thousandth of a millimetre.

Production of point level sensors

The key element of every vibrating level switch is the vibrating element. The components are welded together by laser. Afterwards the piezo drive, which causes the vibrating rod or the tuning fork to vibrate, is installed. Since point level sensors touch the medium, the process fittings must fulfill different requirements depending on the area of application. In the food and pharmaceutical industry, for example, all parts which come into contact with the medium must be polished perfectly smooth. For this reason, process fittings are manufactured individually for every order and then welded together with the sensor modules.
PERFECTION

PUT TO THE ACID TEST

The perfect product
Perfection is a big word. Yet the goal of every quality assurance department is to strive for the perfect product: functional, long-lasting, resilient. To earn the rating “perfect”, a measuring instrument must exhibit high product quality. That’s why the quality assurance department puts all instrument components through their paces. To do this, powerful and efficient testing technology stands ready, from an X-ray microscope with up to 10,000-fold magnification and a spectral analysis instrument to a 3D coordinate measuring machine. VEGA also places high demands on the production process. The tasks of the quality assurance also include assessing risks, keeping a watchful eye on production and making sure the environment management system is complied with.

Quality right from the start
If the product is to be perfect, it has to be fully developed when it gets to the customer. Therefore, at VEGA, quality assurance is already integrated into the developmental stage of new products. Thanks to their long-standing experience, the employees in quality assurance know the operating conditions in the widely different industrial areas and know exactly what’s important in which sector. This knowledge also flows into the production processes: What are our goals? How do we improve quality still further? And how can we determine if our efforts are successful? Every month, the VEGA quality assurance people answer these questions in close coordination with the production department. Faithful to the motto: Getting still better, together!

Just like in real life
Already at home, VEGA gauges are made to understand what awaits them out there in the world. In the environmental simulation, the quality inspectors expose them to burning heat and biting cold, let them stand out in the rain, put them under extreme pressure, give them electric shocks and shake them vigorously. Every instrument must be ideally prepared for its future application area. Some of them must endure temperatures between -80 and +500 °C. Others must not be bothered by a relative atmospheric humidity of 98 %. Still others must remain unimpressed by pressures up to 3,000 bar, and shrug off vibrations up to 2,000 Hz and lightning strikes up to 25 million watts. Only instruments that pass this acid test are released for deployment in the real world.

With certificate and seal
External, accredited certification bodies put VEGA’s processes, products and management systems to the test every year. The result: VEGA’s quality management system is already certified according to ISO 9001 since 1993, the environment management system has had the ISO 14001 certificate since 2001 and the welders and welding methods are certified according to AD2000/HP0. For pressure-bearing and medium-touching parts VEGA instruments have the material certificate, for technical tests they have the acceptance test certificate according to EN 10204. Checked quality with certificate and seal!
Being mobile and thinking ahead: Good traits that find acceptance around the world.
RIGHT NEXT DOOR. EVERYWHERE IN THE WORLD.

VEGA international
Consultation in South Africa? Commissioning in Eastern Asia? Service at the polar circle? VEGA delivers, installs and services level, switching and pressure instrumentation all around the globe. No matter where technologies and services from VEGA are used in the world: VEGA customers find the subsidiaries and sales partners right next door. Everywhere.

On all continents
VEGA customers and their projects are internationally oriented. Therefore, VEGA is too. To offer customers everywhere in the world the convenience of regional proximity, the company is not only represented on all continents but also in many different countries on these continents. VEGA is active in 35 countries in Europe alone. In North and South America there are ten, in Africa and the Middle East 19 countries in which VEGA can be found. The company also maintains intensive contact with the Asian and Pacific markets, making use of agencies and subsidiary firms in 17 countries.

High-quality consultation worldwide
VEGA takes care that all customer consultants and service employees worldwide have the same level of knowledge. In regular training sessions the employees are kept informed about current developments in measurement technology and about new products. For customers this means: wherever they turn to VEGA with an important matter, the employees will advise them competently and with expert knowledge. VEGA customers are often amazed at how fast the customer consultants are able to understand an industry-specific problem and come up with a solution – usually right after the first contact by telephone or e-mail. The same applies to the drawing up of offers: interested parties receive a tailor-made offer for their individual project within the shortest time.

Instrument selection via Internet
Extensive information about all instruments and applications is available on the VEGA homepage, ready for download in several languages. In addition, customers can quickly and easily put together an instrument there according to their own needs: online they can determine directly and with only a few mouse clicks which measuring technique is the most suitable for their special application and which particular features the instrument should have. They have a free selection, from housings to electronics right through to process fittings, and get at the end specific details on price, availability and delivery date of the order.

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Measurement at trade shows
VEGA accommodates its customers and is simply always where they are. The company from Schiltach is present at the most important trade shows of those industries that depend on precise and reliable measurement technology. Here, the VEGA consultants introduce all the new products to visitors and discuss personally with them the best solution for the respective measurement proposal. In addition, VEGA demonstrates measurement technology in action, in many different application areas.

Visiting VEGA
If the time at one of the big shows is nevertheless not enough to see and discuss everything in detail, customers can drop in at VEGA any time. Moreover, the company offers several events every year at the corporate headquarters in Schiltach, to which customers are invited to attend. All questions are answered during informative workshops and lectures. And while there, visitors also have the opportunity to take a look behind the scenes.

Seminars: learning practically and efficiently
VEGA wants to make life for instrument users as easy as possible. That’s why VEGA offers industry-specific seminars in house or at the customer’s location, during which users quickly and efficiently learn how to handle VEGA equipment. These seminars, during which VEGA consultants can put theory into practice with an extensive array of instruments, provide a deep insight into the world of measurement technology. Besides that, this “learning by doing” with the group is simply much more fun than studying an operating instructions manual alone.

VEGA on wheels
The VEGAMOBIL is the in-house exhibition on wheels. It is on tour in all of Europe, paying visits to VEGA customers on site. Fully functional sensors are installed on the inside of VEGAMOBIL. This allows VEGA consultants to answer all questions on level, switching and pressure instrumentation clearly and tangibly. The VEGAMOBIL offers a comprehensive survey of all the different measuring systems: from radar and ultrasonic sensors to vibrating level switches to pressure transmitters.

CLEAR CONCEPTS.
CLEAR COMMUNICATION.
Service in record time
VEGA accomplishes the amazing feat of delivering custom-designed instruments usually within a few business days. Behind this is the “speed” concept, which VEGA has introduced into all areas of order processing. “Speed” is a sophisticated interplay of EDP and work planning that takes effect the minute an order is entered: whenever an order comes in, all levers are immediately put in motion to make sure this order is fulfilled in record time.

Everything complete? Then, off with it!
In the completion and shipping department, everything that belongs together comes together: this is where deliveries for the customer are sorted out and assembled. The ordered goods are checked for their completeness and scanned for the system. The staff members enclose instrument-specific documentation with every shipment, pack it carefully and send it off.

Operating instructions on demand
There are almost 600 operating instructions manuals for all the VEGA instruments, respectively in at least six languages. A gigantic amount of data that must also be updated regularly. VEGA has found a clever solution: the text modules relevant to the various instrument versions are maintained in a database system. At every order, the system allocates an appropriate operating instructions manual to the individual instrument data. Current documentation is thus produced for every instrument and printed on the in-house digital printing press.

All information at a mouse click
As everyone well knows, operating instructions manuals always tend to be not around when they are occasion-ally needed. Customers therefore also have the option to get all information on their particular instrument version online from the VEGA homepage. They can simply enter the serial number of the instrument and get with one mouse click the instrument name, the article number, the delivery date as well as the relevant documentation like operating instructions manual and safety data sheets.

Available around the clock
Since technical problems do not always occur conveniently during the usual office hours, VEGA technicians are within reach worldwide and around the clock via the service hotline. Like all VEGA employees, the hotline advisers get continuous training so that they are able to offer service with expertise. The competent contact persons answer many questions as quick as lightning on the telephone. If a more obstinate problem does come up, a service employee hurries to the location to solve it.
Trust, reliability and communication: Only the one who has strong roots can grow out into the world.
PICTURESQUE: THE MARKET PLACE IN SCHILTACH

ROOTS

TOWN, COUNTRY, RIVER: VEGA SPARES THE ENVIRONMENT AND MAKES CLEVER USE OF NATURAL RESOURCES

A location worth living in
One who is active around the entire globe needs solid roots at home. For VEGA, this home is the Black Forest. Company founder Bruno Grieshaber himself had a close connection to this region – a connection that has sustained VEGA for 50 years. The company is still loyal to the location in Schiltach today, and regards its commitment to the region as a mutual giving and taking: VEGA supports culture and the protection of the Black Forest landscape and thus contributes to the location so that it remains a place where VEGA employees like to live and work.

Maintaining nature and culture
The site of the VEGA corporate headquarters has nothing in common with the usual notion of an industrial area: the town of Schiltach is a true gem with its picturesque medieval old town and the corporate building itself is also idyllically located directly on the small river Kinzig. Perhaps this special situation in the midst of nature is the reason why VEGA considers it especially important to use resources effectively and responsibly and with environmental awareness. Because whoever enjoys such beauty of nature and culture every day will most likely strive to hold a protective hand over it.

For the sake of the environment
Already a long time before the concept of climate protection was the talk of the town, VEGA introduced of its own accord an extensive environmental management system. This led to the construction in 1997 of its own hydroelectric power station, which has since then covered a large portion of VEGA’s energy requirements. Moreover, all departments of the company have taken steps – innumerable small, many large and a few gigantic ones – to reduce the load on the environment still further. The steps were the right ones: VEGA was certified according to the environmental norm ISO 14001 already in summer 2001.

Two birds with one stone
The hydroelectric power station does not only provide VEGA with energy. It also gives VEGA the opportunity to deploy level and pressure measuring instruments under real conditions and demonstrate them to visitors. The water level in front of and behind the turbine, the flow rate and speed, yes even the level in the vessel holding flotsam in the weir, are measured exactly by many different VEGA sensors.

FEELING AT HOME

A location worth living in

Maintaining nature and culture

For the sake of the environment

Two birds with one stone
The right atmosphere
Motivated and committed employees are the basis for a successful company. At VEGA you’ll find them in every department, across all age groups. This is no accident – and neither is the relaxed, pleasant work atmosphere, which the employees often describe as “family-like”. An astonishing statement in a company that employs over 500 people at the corporate headquarters in Schiltach alone. Astonishing, but explainable: VEGA makes it a point to create an enjoyable work atmosphere, by not only encouraging mutual activities but also a work etiquette that promotes satisfaction and trust.

A good workplace
A job at VEGA is more than just a job. Both the atmosphere and the work environment are what they should be: from the spacious, well-lit offices to the company bus that brings many employees to work and safely back home again. Flexible working times provide the employees with the freedom they need to be creative and come up with ideas, but also to take care of family and other personal matters. On the Partner Day and at the “Fun for Kids” event, all partners and children of the employees are invited to get acquainted with VEGA. This care for the workforce is also reflected in the staff statistics: VEGA has a conspicuously low fluctuation and an extremely low number of persons taking sick leave.

Secure in the future
The world changes every day and we humans must keep learning. Nowhere is this more obvious than in an enterprise that deals with technological progress on a daily basis. VEGA regularly offers seminars and language courses for its workforce. The employees thus stay fit for new markets and technologies. And because there is also a life after VEGA, the company supports employee pension plans through various offers.

Active together
Common activities and communication are a big thing at VEGA: the employees organize company outings, meet in the company restaurant or work on the “VEGA express”, the company newspaper for the workforce. Even outside work time you can sometimes find VEGA employees getting together for recreational activities: they go biking, climbing or training for marathons. And speaking of sports: at the annual VEGA health week there are offers of sports activities, diet tips and workshops on health topics that all employees can take advantage of.

Meals for body and soul
“This is not a canteen, this is our company restaurant!” All VEGA employees attach great importance to this difference, and that for good reason. The meals are prepared daily from fresh ingredients and with the greatest care. The kitchen philosophy of the restaurant team dovetails perfectly with the company philosophy: love of detail and the desire to make the workforce feel good.
**TRAINING TO BE A PROFESSIONAL**

**Achievement allowed**
Young people are highly motivated when they start their education. They want to accomplish something and be allowed to tackle things themselves, not just stand by and watch. At VEGA, individual initiative is expressly desired and supported. The young people get optimal preparation for their chosen profession. By participating in team projects, they expand their ability to think and act responsibly on their own. Following a well thought-out educational concept, VEGA makes the trainees fit for an internationally oriented professional life: they use foreign languages in their daily work and even have during their education the possibility of working abroad in one of the VEGA subsidiaries.

**Instructors who continue their own education**
The quality of an education has a great influence on the later career. VEGA instructors convey to the young people the concept of “lifelong learning”. And they set a good example themselves: all commissioned instructors take part in an ongoing training program.

**Interprofessional learning**
VEGA trains young women and men for careers in business and electronics technology, among other things. The technical qualification is of course very important. But pure specialized knowledge is not the only thing that distinguishes really good employees: the ability to communicate, present ideas and work in a team, a good command of creativity techniques and know-how in project and idea management are also important. That’s why during the entire training period, VEGA trainees take part in youth seminars in which precisely this interprofessional knowledge is imparted to them, parallel to their technical education. When they complete a graduation project as a team, the trainees of each year’s class leave their mark on the company.

**Integration weekend**
When a new class starts its training, all the trainee classes, i.e. age groups, always organize a so-called “integration weekend” together. It’s an ideal way for “the new ones” to get acclimatized and a good opportunity to get to know the “old timers” among the trainees and to ask them questions. The weekend is organized entirely by the trainees themselves.

**Youth in Science**
By participating in the “Youth in Science” competition, the trainees have the opportunity to start their own self-chosen research project. That’s how they learn to develop solutions to specific problems. They thus gain experience that is extremely valuable for their later career.

**Trainees as walking adverts**
The VEGA trainees are the best advertisement for an education at VEGA. For that reason, the trainees are entrusted with the task of keeping the company in touch with young people who are at the point of choosing an occupation: at the annual Career Information Day, it is the trainees who answer the pupils’ questions about the recognized trades at VEGA. The VEGA trainees also offer an “Etiquette Workshop” at schools in the region. They playfully practice rules of behavior that are important for job interviews or internships. In addition, the VEGA trainees design and edit the youth magazine “whatz up” for students in the region. The magazine is all about choosing an occupation, applying for a job and studying.
GETTING AHEAD

OPEN DOORS FOR STUDENTS

From theory to practice

Whether it’s a practice semester, a pre-traineeship or cooperation as a working student: the doors at VEGA are open to young people studying at universities. They get all the support they need in the practice phase of their studies. Projects constantly arise in the various departments and the students are smoothly integrated into them. Experienced mentors accompany and help them put their theoretical knowledge into practice. Parallel to the studies, VEGA offers a trainee program that imparts to the students, besides technical know-how, vital interdisciplinary competences. Students also have the chance to gain international experience through cooperation on a project. VEGA keeps on hand exciting subjects for bachelor or master theses for economists and engineers who have to present a final paper at the end of their studies. Qualified VEGA employees help the students put their ideas into action. By exchanging thoughts with them, the prospective graduates gain deep insights into their future professional practice.

Partner for UCE studies

Whoever decides in favour of studies at a university of cooperative education (UCE) decides in favour of the ideal combination of scientific learning and proximity to practice. Because, the dual principle of UCE courses provides, as regards content, a close dovetailing of theory and professional routine. VEGA offers the possibility of doing UCE studies in the fields of industrial engineering with business studies and electrical engineering (Bachelor of Engineering) as well as business informatics (Bachelor of Science).

Two partners take over the task of qualifying the students doing the dual UCE study program: on the one hand there is VEGA, who contributes the practical part of the education, and on the other hand there is the university of cooperative education, who takes over the theoretical part. Furthermore, VEGA students have the possibility of completing a practice semester abroad. This makes the studies not only diversified, but so practical that the graduates of the UCE can self-reliantly take over demanding tasks in a company immediately after finishing the studies.
Future, present and past: the key to entrepreneurial success is called sustainability.
HISTORY

HOW IT ALL BEGAN

A sparking idea

VEGA founder Bruno Grieshaber must have been born with a good nose for opportunities. This was obvious already years before he founded VEGA, when he returned from the war and found the family-owned company “Gebrüder Grieshaber” devastated. He had a sparking idea: without thinking long, he put together a couple of functional apparatuses from the pitiful remains of the shop machinery and produced from left-over detonator sleeve nuts very novel cigarette lighters, which became popular with the French soldiers stationed in the region. The family-owned company was thus saved and, together with his cousin Albin Grieshaber, Bruno Grieshaber became in 1953 managing director of “Gebrüder Grieshaber”.

From turned parts...

That was the new beginning. But the turned parts business is subject to strong economic fluctuations. So Bruno Grieshaber placed his bets on diversification. Electrical engineering was still in the early stages of its development at that time; the transistor was just invented. Bruno Grieshaber was nevertheless convinced: electronics is the future! So the company went about gathering first experiences in the production of radios, like the bicycle radio Veloton, and for a while also produced amplifiers for record players and tape recorders. However, as so often happens, it was chance that steered destiny: Bruno Grieshaber met an engineer who was occupied with the question, “How can the levels in vessels be measured electronically?”.

...to level measurement

It was a question practically tailor-made for a tinkerer like Bruno Grieshaber, who obstinately worked on a problem for however long it took to solve it. By 1959, things were ready to go: under the company name VEGA – Vertrieb Elektronischer Geräte und Apparate (Sales Company for Electronic Instruments and Apparatuses) – the first tube level gauge was brought onto the market.

Everything grew from there: at VEGA, the new associate firm of “Gebrüder Grieshaber”, enthusiastic technicians made it their goal to find a solution to every measuring problem. In the sixties, the company applied for numerous patents on new measuring techniques. In 1975 VEGA had already 100 employees. Room in the Wolfach operation got scarce, so Bruno Grieshaber bought the building of a former textile factory in Schiltach. VEGA then moved to the site where the company headquarters still stand today.

50 years of VEGA – 50 years of success

Today VEGA employs over 900 people worldwide and is the largest of the three partners in the Grieshaber group. Since its founding in 1959, VEGA has grown continuously. Its turnover today amounts to about 225 million Euros annually; its export quota is over 75 percent. The company has set milestones in measurement technology again and again in the last 50 years. In the area of radar level measurement, VEGA has played the leading role worldwide for over ten years.

What started in 1903 as a small craftsman’s establishment has developed into an internationally operating corporate group: in addition to VEGA, also “Grieshaber Präzision” and “Supfina” belong to the Grieshaber group. This economically strong group stands for stability and reliability. To its guiding principles belong the desire to preserve the location in Kinzigtal and a keen environmental awareness.
1st Decade
1959
Bruno Grieshaber founds VEGA

1964
Patent application “Current-oriented measurement”

1967
Patent application “Capacitive electrode”

The transistor inverter VEGASTAT becomes a sales hit

2nd Decade
1973
Production start of pressure transmitters for continuous level measurement of liquid media

1975
Move to Schiltach with 100 employees

1976
Manufacture of the ultrasonic measuring instrument VEGASON

1979
Production start of vibrating probes, e.g. VEGAVIB

3rd Decade
1980
First microprocessor controlled VEGAMET introduced at “Interkama”

1982
VEGA expands: more room for laboratory, engineering, purchasing and training

1984
The quality assurance department is created, EDP is expanded

1985
Federal Cross of Merit for company founder Bruno Grieshaber

1986
Expansion: a new five-story building

1987
Purchase of Fibronix Sensoren GmbH, Kiel (ceramic technology)

1988
Economic Medal of the State of Baden-Wurttemberg for Bruno Grieshaber

4th Decade
1989
VEGA receives the “Prix de Promotion”

1993
New area of business: process and differential pressure

1993
Certification according to ISO 9001

1997
Construction of an own water turbine on the Kinzig for electricity generation

1998
VEGA becomes worldwide market leader in the area of radar with the two-wire radar measuring instrument eric®

5th Decade
1999
New production and administration building in Schiltach

2003
The instrument family plcis® is introduced

2004
Delivery of radar instrument No. 100,000

2005
Company founder Bruno Grieshaber dies at the age of 86

2008
Market leader in radar level measurement of bulk solids with the sensors VEGAPULS 67 and 68

2009
VEGA celebrates its 50th birthday
Jürgen Grieshaber, as managing director, has directed the destiny of the company for 15 years. With feet firmly on the ground but farsighted, with a quiet hand but much lifeblood, with a view of the whole picture but a fairly good idea of the details. Before he switched to VEGA, Jürgen Grieshaber was managing director of the sister company “Grieshaber Präzision” for many years. Then, the fascination of VEGA got hold of him and never let go.

A 50-year company anniversary is a good occasion to have a look into the future. When he looks at the company, Jürgen Grieshaber sees two central values that have always made VEGA what it is, that may even be regarded as the “secret of success” of the company. Firstly: “VEGA is a family business in the classic sense and, to be more precise, without the involvement of people or organizations that are more interested in money than in people.” Secondly: “VEGA’s goal is to make sure that every employee likes coming to the company every day.”

Also in the future, these two values will be the shining beacons that direct the company’s policies and decisions. “If these two things work, then everything works”, exclaims Jürgen Grieshaber with certainty. Out of them arose the spirit of confidence, responsibility and recognition that sustains VEGA even today, 50 years later. “Even if it does sound a bit emotional”, says Jürgen Grieshaber, “we really do practice old virtues here: reliability, honesty, humanity and straightforwardness.”

“Certainty brings forth freedom. Freedom brings forth creativity”. This is the simple formula behind the trustful work atmosphere at VEGA. If employees are to come to work and give their best, they need certainty. The certainty that their workplace will also be there tomorrow. Because only he who has strong roots can rise above himself.

“This certainty is something a profitable family business can give best, because it does not think in terms of quarters but generations.” That’s how “JG”, as Jürgen Grieshaber is called by the workforce, defines his understanding of entrepreneurial responsibility.

But what is much more important: he also acts according to that understanding. VEGA will in future continue its involvement with social projects for people in the region and its commitment especially to children and teenagers. Because he who thinks in terms of generations knows that children of today are the potential employees of tomorrow. These employees seek their future prospects in an attractive and economically strong region. “We trust the people who live here and believe in them. That’s why VEGA will invest in this location, also in the future,” says Jürgen Grieshaber.

In the anniversary year 2009, VEGA is sending out a clear signal that this declared belief in the location in Kinzigtal is meant seriously: plans for the company building extension are already on the table.

The five-story building, in which VEGA is investing about 20 million Euros, will increase the floor space from nearly 28,000 to 38,000 square metres: room for growth, room for new ideas, room for people.
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