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Growth in the fifth generation.

SAFE DRINKING WATER IS EVERYTHING. But can't be taken for granted.





CLEAN DRINKING WATER FROM EVERY TAP: WHICH SEEMS GRANTED, IS NOT THE CASE EVERYWHERE.



Drinking water. It is an essential nutrient and crucial when it comes to hygiene. Drinking water is critical to our health. Especially regarding its use within a building.

We think about clean water all the time. So that you don't have to

Drinking water is one of the central issues of our work. Because we see our main purpose turning spaces into living rooms and installing what people need in their everyday lives. Above all, this means ensuring we can use our drinking water without a second thought.

However, there are numerous factors that influence the quality of drinking water, and maintaining this quality cannot be taken for granted. Different factors such as irregular usage, stagnation, too low temperatures in hot water or too high temperatures in cold water may create conditions in which legionella and other germs contaminate the water and pose a danger. That's why it is essential to take measures that preserve the quality of drinking water.

Drinking water quality. Intelligently networked

We already offer appropriate solutions, which we are continuously enhancing. Our pipeline and system infrastructures run through entire buildings across all floors. They form a hygienic network of intelligent connections from the entrance of the building to the last draw-off point. An integrated view of the individual system components allows us to control everything as required. And to have suitable answers to the important questions.

Water is flowing, so too is data

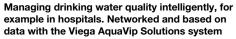
Where does a water exchange need to take place? And when? What is the temperature of the drinking water? How can deviations be detected and regulated autonomously? How can we digitally connect the network of pipes to ensure both the flow of data and the flow of drinking water? And how can we guide and support our customers from the planning stage right through to the operation of the drinking water system? So that drinking water maintains its quality over the long term. As a nutrient. And for the sake of our health. Out of a sense of responsibility.

The drinking water installation is a system that can be impacted by many different factors. And the more complex the system, the greater the potential for vulnerabilities.

For example, take hospitals, care facilities, holiday parks, hotels or residential complexes: To guarantee continuous drinking water quality in these areas, technological support is needed. Starting at the right selection of the materials suitable for the corresponding application, via individual automated solutions, through to a fully intelligent networked system.

That's why years ago we completely changed the way we research drinking water at Viega. An international team of laboratory staff, researchers, data analysts and product developers work closely together with external experts to take health and drinking water hygiene to a new, future-oriented level. In future, having a real-time status display and a continuous adjustment of hygiene-relevant parameters will be the key to maintaining a consistently high quality of drinking water, which is so essential to our health.







"

PICTURE THIS: A DRINKING WATER INSTALLATION THAT NOTICES ITSELF WHEN SOMETHING IS WRONG.









THE KEY TO REPLACING CONVENTIONAL ENERGY SOURCES: UNCONVENTIONAL THINKING.

One of the most effective ways to protect the climate and build a sustainable future is to consistently conserve energy. This can be achieved by optimising systems so that they consume significantly less energy.

Using less energy does not mean we have to have cold feet

For instance, our researchers and engineers have developed energy-efficient surface temperature regulation systems, water-saving solutions, and products that, thanks to optimal flow properties, reduce the amount of hot water in the pipes and with that potential energy losses. Digitalisation and the ability to intelligently network systems also result in greater energy efficiency and sustainability. Our research department has even come up with a major development that marks a paradigm shift. We are confident that we can massively reduce the energy consumption of buildings in an area where no one thought energy savings were possible: in the hygienic preparation of hot water. The use of the new technology enables the sustainable, economical and ecological use of renewable energy sources in both new buildings and complete renovations. This also means that we are actively supporting the essential climate protection policies such as the German government's Climate Protection Plan and policy on heating (Wärmewende) as well as the EU's Green Deal.

As a company, we are also leading by example

come with sustainable solutions.

This includes measures to reduce CO₂ emissions, environmental analyses, more energy-efficient production and self-generated electricity from environmentally friendly power plants. Just what you would expect from Viega. We have always been one of the drivers of innovation in media-carrying piping systems. This is largely due to the fact that we regard the supply infrastructure of buildings as lifelines. This perspective allows us to see things differently, and in a much wider context that always reconciles the economic considerations with the ecological aspects. This means that we can responsibly shape the future for many generations to



Patrick Steger and Christian Otto, Implementation Managers in the Centre of Excellence for Water If you start to evaluate the energy demand of modern buildings, you quickly realise that it has long been the case that most energy is not used for heating, but for heating drinking water.

To date, the current technical regulations require a minimum hot water temperature of 55 °C in the circulation circuit in order to maintain the quality of the drinking water. This is the case 24/7. On the flip side, every degree lower that we take that temperature saves energy in the building, which offers enormous potential for energy savings. This is particularly the case when you calculate an even greater reduction of say 5–12 °C, which is feasible since a higher usage temperature is rarely needed, then multiply that across a large number of buildings.

Depriving legionella of the basis of life. Not humans

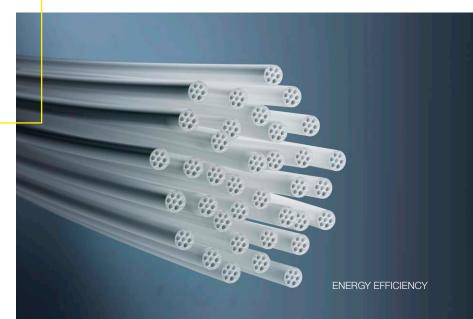
We are absolutely certain that by using ultrafiltration in the circulation system bypass, we can ensure a hygienic hot water supply from as low as 45 °C. Heating drinking water becomes more efficient and at the same time the heat loss from the pipes and in the buffer tank is reduced. The efficiency of renewable energy sources such as heat pumps is improving dramatically, making it possible to use them as the sole energy source in modern buildings. A sustainable contribution to climate protection that benefits all future generations.

The question remains: How can we lower the water temperature without causing hygienic risks? After all, if legionella can multiply more at the targeted lower temperatures, how can their growth still be prevented?

The solution: the innovative use of ultrafiltration. This technology enables us to continuously reduce the total number of bacteria and the nutrients necessary for their survival in the hot water. By eliminating the associated risks, it is possible to significantly lower the temperature of the hot water and with it the energy consumption.

This is what we are researching and developing and see it as a groundbreaking innovation for climate protection and drinking water hygiene. However, there are other factors affecting the energy requirements of buildings that we have to take into account when developing our systems. For example, we are working on pipe connectors with optimised flow properties and new valve technologies and systems. We are reducing heat loss and digitalising systems to improve efficiency. We are also increasing transparency by providing facility management with all the relevant operating data. Furthermore, we are developing radiant heating and cooling systems designed to meet low-energy standards, with the option of automatic and permanent hydraulic balancing. We are doing all this so that we can make a sustainable contribution to our environment.

Energy-efficient buildings through the use of innovative ultrafiltration to allow the temperature drop for hot water





ACT SUSTAINABLY FOR ALL THOSE WHO COME AFTER US.

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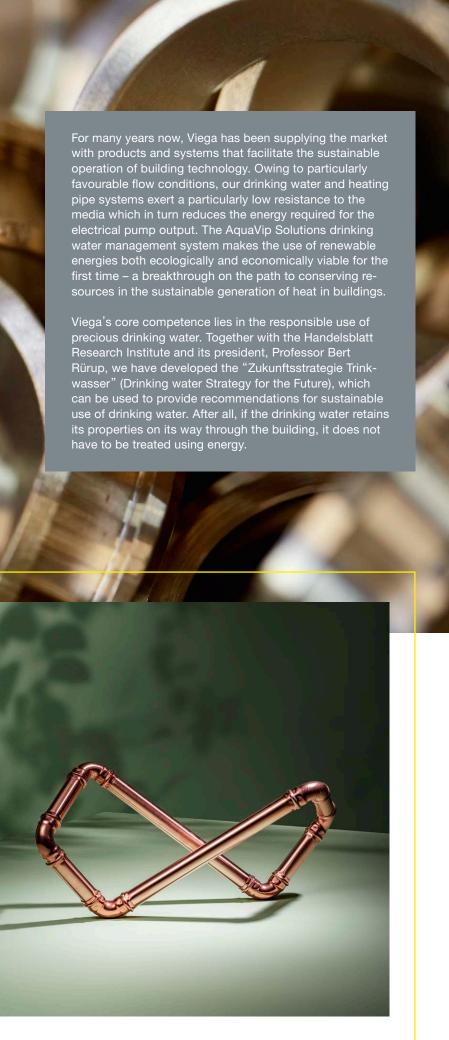
There are many aspects to sustainability, but one fundamental principle in particular stands out: It is only thanks to the forward-looking actions of our predecessors that we, as a company, are in a position to fulfil our responsibilities.

We feel committed to upholding this legacy, for the sake of the environment and future generations.



WE WANT TO BE PIONEERS. ALSO WHEN IT COMES TO SUSTAINABILITY.

For Viega, the term sustainability is not just a buzzword, but a guiding principle for taking action today and in the future. That is why we as a company have defined six goals for our Viega sustainability agenda, which we resolutely pursue. These include measures for clean water, the use of renewable energies, making production more sustainable and our commitment to digital construction.



Processing valuable raw materials in such a way that they can be reused decades later is one of Viega's key priorities

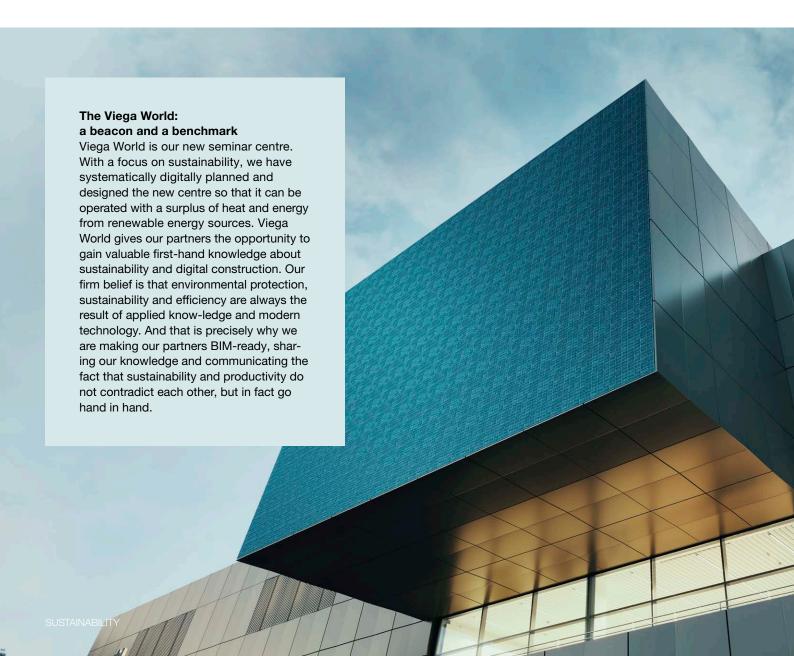
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We attach equal importance to ensuring that all Viega press connector and pipeline systems can be reused. Our metal connection pieces and pipelines not only last for decades, but due to their high material value, they can also be easily fed into the cradle-to-cradle process and sustainably reused. The same applies to our products made of plastic, which can be recycled without any problems due to their composition.

We also focus on sustainability with our packing materials. FSC cardboard packing, label material made from renewable raw materials, minimal material thickness of our plastic packing and the use of recycled polyethylene are just a few examples of the way we use hygienic packing with minimal environmental impact. Optimising our footprint while maintaining the highest possible quality.

LEADING BY EXAMPLE: WITH THE HIGHEST QUALITY AND RESOLUTE ACTION.

Viega products and systems enable the industry to install sustainable solutions. However, we see our own processes and buildings, including our production methods, as providing the real "proof of concept". This is where we consume resources and therefore bear particular responsibility.



Drinking water is valuable to us in every respect. That is why we treat and reuse it at Viega. Processes such as reverse osmosis or vacuum evaporation conserve water as a natural resource as much as possible. We also try to operate as sustainably as as we can with regard to the unavoidable use of energy in our production. That is why we continually review all our processes, modernise them and save energy. The results speak for themselves: although Viega's turnover increased by 40% and the number of employees by 28% from 2015 to 2020, energy consumption only grew by 8% during this period.

Naturally, we also have established recycling cycles and carry out constant monitoring. We choose to cover our energy needs with wind power and have created a sustainable mobility mix for our employees. For example, we have converted our company cars to electric vehicles and expanded the number of charging stations. We also provide our employees with a company bicycle. At Viega, we see it as our joint responsibility to use the right mix of energy sources. By doing all this, we are on a sustainability journey that will never end. We are continuing to move forward, step by step, with the aim of improving ourselves even further.



FOR US, SUSTAINABILITY IS A HOLISTIC CORPORATE



The UN has honoured our commitment to sustainability in its "50 Sustainability & Climate Leaders" initiative. The global campaign aims to draw attention to international companies whose actions make a contribution towards achieving the United Nations' sustainability goals.



COMFORT IS HAVING TECHNOLOGY THAT KNOWS WHAT YOU WANT. Before you do.

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Yesterday's utopia is now today's reality. Smart technologies are now being seamlessly integrated into our homes significantly enhancing the quality of our lives.

People no longer have to adapt to the room – the room adapts to them along with their individual requirements.



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The Viega Advantix Cleviva shower channel: space saving combined with outstanding design



WHEN PEOPLE AND TECHNOLOGY SPEAK TO EACH OTHER WITHOUT SPEAKING.

We have long since had a flexible approach to the way we think about spaces.

Height-adjustable WCs and washbasins, programmable feel-good temperatures and touchless flush plates are just the start. There is more to smart technology than simply adapting to special requirements and demographic challenges. Its greatest potential lies in digital networking and with it, the ability to control comfort automatically.

Technology that thinks for itself – a fascinating prospect that is also aesthetically pleasing. The design of the new generation not only draws on a visionary use of shape and high-quality materials, but above all offers comfort and functionality. The Advantix Cleviva shower channel, for example, appeals in equal measure with its minimalist elegance and particularly easy cleaning.



Living space is becoming increasingly tight and therefore needs to be used all the more efficiently. Our pre-wall system makes it possible to plan for optimum use of a room, whilst maintaining the same high level of design and function.

IF YOU WANT TO
PLAN THE FUTURE, YOU
HAVE TO UNDERSTAND
ITS CHALLENGES.

Jennifer Hausmann, Director Pre-Wall & Drainage

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Combining design, comfort and hygiene: the touchless Visign flush plates



That is why we are already working on concepts today that will enable us to meet the installation challenges of tomorrow. Digitalisation offers a wide range of possibilities that help us find sustainable solutions to reliably maintain the quality of drinking water, and to design living rooms that promote our health and well-being.

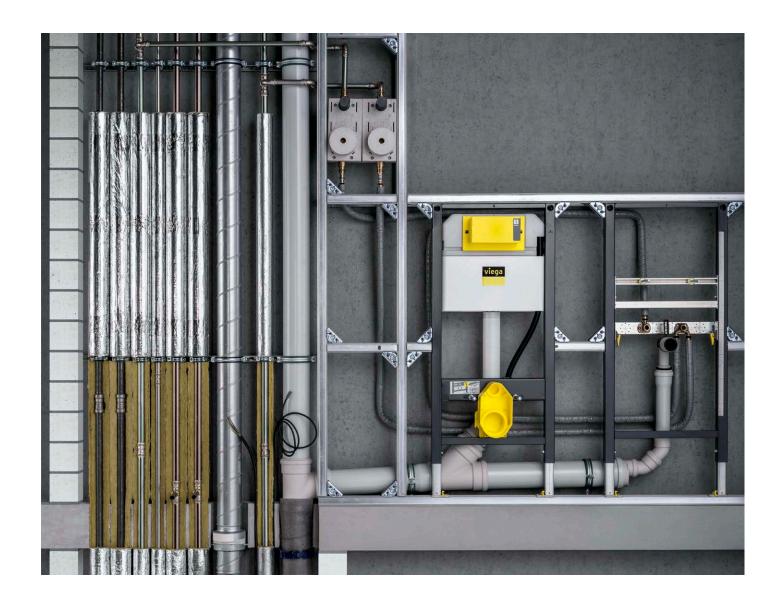
Our touchless applications and smart function controls will definitely play a key role in the room concepts of the future, demonstrating once again how technological expertise can be used to set new standards of comfort and, above all, hygiene.

WE ENSURE THAT PEOPLE DO NOT HAVE TO WORRY ABOUT THEIR SAFETY.

We all have a basic need for protection and physical well-being.

It is therefore our task to design living rooms with safe installation technology, enabling people to feel completely protected at home. Only then can people live and work carefree in a safe environment.





SAFETY CREATES A SENSE OF SECURITY. FACTS PROVIDE CERTAINTY.

We see our greatest success in the trust that people place in us, our products and our systems around the world – knowing that we leave nothing to chance when it comes to protecting life and limb and preserving property and buildings.

Be it in industry, public institutions or private homes – every building has its own architecture, its own uses and its own requirements.



The space-saving Viega zero clearance: protects life whilst allowing life more space to live

We are therefore repeatedly faced with the question: How can we grant safety the space it needs, when space is at a premium on the construction site? After all, regardless of how important it is to make efficient use of the space available, protecting people and the building must always come first. That's why at Viega we develop highly space-saving systems that can be installed in even the smallest of shafts. You may not always be able to see them, but our products guarantee the highest level of safety for people and the building. We achieve this by selecting high-quality materials, using the most stringent testing procedures and carrying out long-term and continuous load tests. At the same time, our innovative system solutions offer the highest level of reliability, practicability and cost-efficiency, eliminating altogether any safety issues in day-to-day work.

Redefining safety standards

With the help of cold press connecting technology, we have succeeded in eradicating the risk of fire from open welding or soldering flames on the construction site. The proven SC-Contur of the Viega press connectors ensures that inadvertently unpressed connections are spotted immediately during the leakage test. Once pressed, the connection is reliably sealed. In addition, we were the first to obtain a type approval for supply lines in mixed installations, setting an example in the field of fire protection.

Our objective is to create practical solutions that not only meet or exceed standards and regulations, but above all offer our customers real added value. That is innovation and safety "Made in Germany".

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TO ENSURE SAFETY IN BUILDINGS, INTELLIGENT FIRE PROTECTION SOLUTIONS NEED TO THINK OF EVERYTHING.

Klaus Arens, Vice President PM Best Infrastructure Bath/Kitchen

Markus Berger, Director of Competence Team Building Physics

Protecting and preserving life is what drives us to settle for only the best fire protection solution.



Safety for every floor lead-in: the Viega R120 pipe lead-in

Key for us is not to overlook anything and to pay attention to the details even if they seem insignificant. If we consider floor drains – this is a great example of how small things can have a big impact. In the event of a fire, smoke and gases can spread from one level to the next through any opening in the floor if nothing is done to prevent it. That is why our fire protection floor drains close automatically when exposed to fire, sealing the floor and preventing the spread of life-threatening smoke and gases.

However, we believe this example demonstrates another aspect very clearly: Intelligent fire protection is designed in such a way that it goes unnoticed in everyday life, but can be fully relied on when it matters. After all, who would think that the humble floor drain in the shower has the potential to save lives?

We are proud to have been able to implement this and continue to work in this area with our full commitment. Our fire protection technology has the potential to do so much more, for example, with our zero clearance space saving solutions, allowing us to take away people's worries but not their precious living space. Each day, we are helping to make the world a little bit safer.

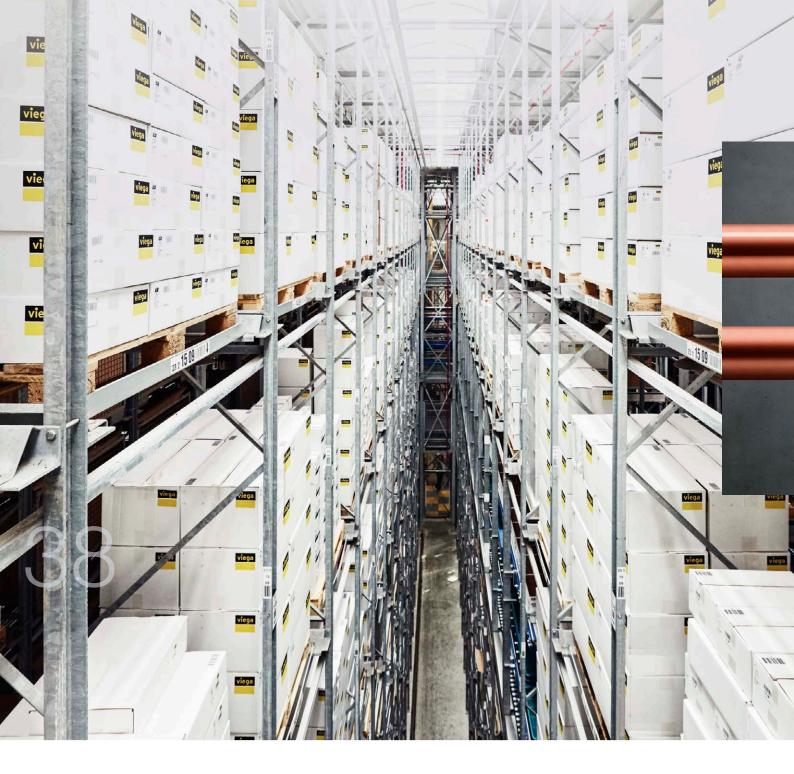
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QUALITY IS EVERYTHING.
WITHOUT IT, NOTHING
ELSE MATTERS.



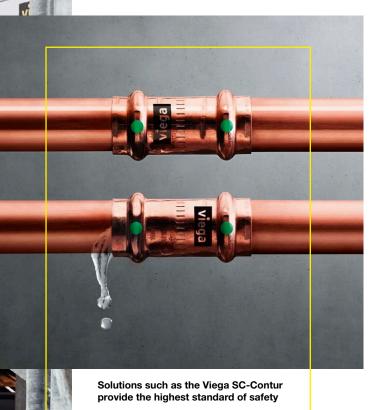
In a world where we face ever greater demands in our work, it is more important than ever to have a competent partner you can trust. Only then can you create something that will stand the test of time. And only then can we embark on a future in which the buildings meet the requirements of future generations.

QUALITY



EVERYTHING WE DO IS CONNECTED IN QUALITY.

And that has been the case for the last 120 years. Our high standards are based on the principle that we should never rest on our laurels. Instead, we move forward tirelessly, repeatedly questioning the status quo and seeking solutions for a future that will inspire us.



Quality determines everything we think and do

Our demand for the highest quality, which runs through all areas of our company, is just as complex as the challenges we face every day.

Highest standards

Those who are connected in quality cannot make any compromises during production and development. This is why at Viega, the highest level of attention to quality is an integral part of our production and research activities. This is made possible by our highly qualified employees, who ensure absolute precision when producing reliable products in modern research and development laboratories and production facilities.

Safety guaranteed

Quality also means developing solutions that offer a real advantage when used on the construction site. The best example of this is the tried-and-tested Viega SC-Contur, which has ensured for over 20 years that inadvertently unpressed connection points are clearly visible. A unique safety feature that enhances the quality of every installation.

Everything in stock – except excuses

With our in-house logistics, we are setting standards in the industry in terms of product availability and services. Intelligent computer technology, multiple error checks and the integration of customerspecific data enable us to adapt deliveries to individual requirements and deliver on time. We are continuously investing in the expansion of our logistics and now have more than 100,000 storage locations at our disposal. Over 17,000 products are permanently in stock and therefore immediately available. Irrespective of whether it's the latest system solutions or individual spare parts, reliability for us begins with the order. Once an order has been placed, we are always true to our word and support our customers throughout the entire process.

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PROVEN RELIABILITY OF EVERY ITEM THAT LEAVES THE FACTORY.



Heinz-Georg Hemmert, Senior Director Integrated Management and Quality Assurance

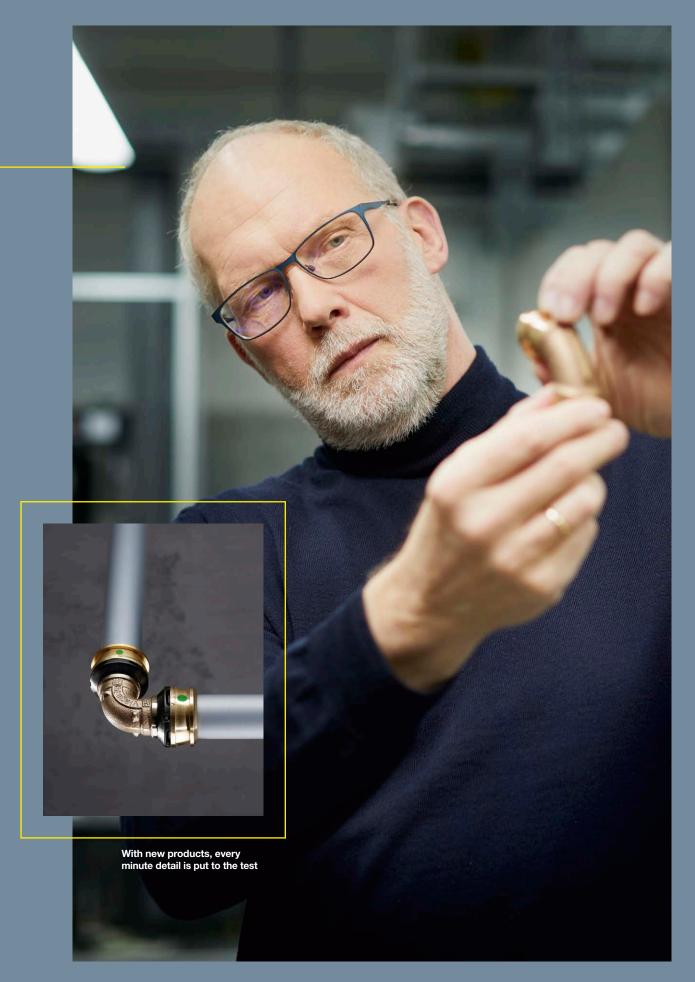
As we look to the future, it is our responsibility to see to it that all our products and system solutions function reliably – because they form the lifelines for the buildings of tomorrow. These lifelines provide future generations with what they need to live. That is why our commitment to quality cannot be ambitious enough.

We are connected in quality. That is why we cannot make any compromises during development, production and testing

In our view, quality assurance begins with the selection of materials. We will only use materials if they meet our rigorous product standards. Everything that later bears the name Viega must be able to withstand the rigours of everyday use. That is why we are always feeding in new knowledge and insights to optimise our products. We do this until we are sure that they will fulfil our expectations.

Using specialised long-term and endurance tests, we ensure that all the requirements of our systems are met. In addition to standards, laws and regulations, these are primarily the day-to-day demands placed on our products. We put our products through the mill and expose them to real extreme situations. For example, our piping systems are placed in the cold chamber where they have to withstand temperatures as low as -30°C without losing any of their properties.

But that's not all. Before a single component is allowed to leave our factory, it is subjected to stringent testing procedures. Visual inspections by the experienced eyes of our employees are just as much a part of this as scanning to the thousandth of a millimetre using state-of-the-art camera and laser measurement technology. Only when we are certain that all the tests have been passed are we satisfied. This is because we are connected in quality.



DIGITALLY PLAN TODAY WHAT MATTERS IN REAL LIFE TOMORROW.



No one is in any doubt any more that the future lies in digital construction. However, in the booming construction industry where order books remain full, the transition is only making slow progress. Yet we need this transformation to digital construction to take place today.



THE FUTURE OF TOMORROW IS NOT BUILT BY THOSE WHO LIVE IN THE PAST.

One thing is clear: The future cannot be built using out-of-date building practices. There are ever increasing demands and complexity throughout the industry. Likewise, our systems are becoming more intelligent and interconnected to support health, comfort, energy efficiency and safety in a sustainable way. As a company that installs the lifelines for the buildings of tomorrow, we fully understand how important digital construction with BIM methodology is for the industry. That is why, through Viega Building Intelligence, we are now also offering this expertise to our partners in the market. If we are to be successful together, it is also our responsibility to ensure that we take our customers and partners along with us on the transformation process from traditional to digital construction.







Data is the building material of the future



We will only benefit from digitalisation if we see it as an opportunity

As one of the market leaders in building services engineering, we have the necessary experience, we give buildings structure, we view them holistically and, not without reason, we have been providing one of the market-leading planning software programmes for many years now.

As a driver of innovation in the industry, we are networked with experts, researchers and developers, laying the foundations today for the construction of tomorrow.

We are currently building the world's most advanced training centre, allowing the entire industry to access and understand the opportunities digital construction has to offer. After all, the benefits that digital construction can deliver are enormous. However, it is only once BIM-supported construction becomes common practice that an integrative construction process will emerge, benefiting all parties involved – construction companies, architects, planners, installers and clients.

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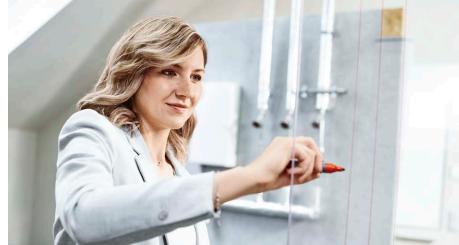
WHEN WE HAVE A FULL PICTURE OF EVERYTHING, WE CAN PLAN FOR SUCCESS.

Ulrich Zeppenfeld, Vice President **Global Service & Consulting Global Sales**

Evelina Knaub, Engineering Consultant Global Service & Consulting

It is impossible for any planner, architect, builder or visionary to predict the future. Yet we can already ensure that it will function and inspire us, by digitally planning today what will really matter tomorrow. We can do this by using intelligent planning tools and modern Building Information Modelling to simulate real situations on the computer, right down to the smallest detail. This encompasses all trades, which is crucial for projects to succeed.





The Viega software enables uncomplicated design and provides a large amount of data that is already BIM-ready



With the digital planning of buildings, we have reached a milestone on the road to the future of construction. Industry, the public sector and also the private sector increasingly require BIM-based planning in order to achieve greater process and cost security.

This allows targets such as energy efficiency, comfort needs and protection goals such as the preservation of drinking water quality to be defined in advance in line with specific requirements. All relevant data is stored in a shared model, which means that all those involved in the construction process have the same level of knowledge at all times, thereby

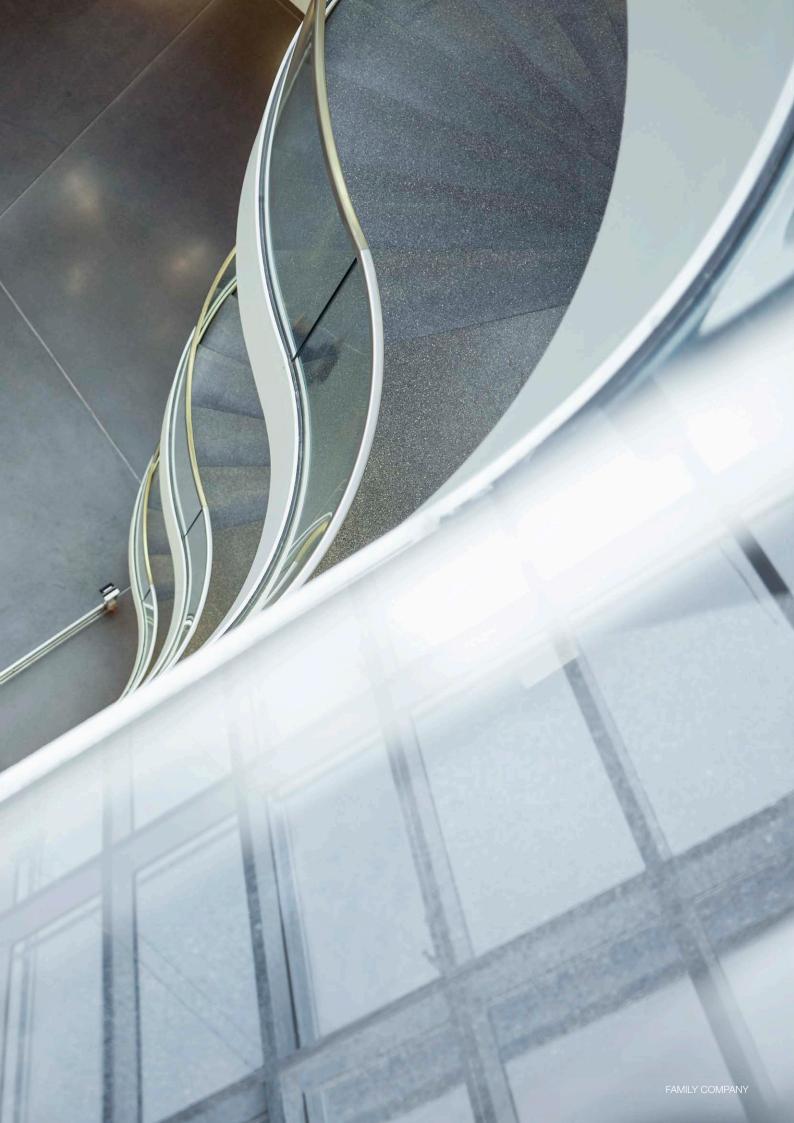
avoiding common mistakes. Through the integrative planning approach and the digital networking of these processes, an overall system that is capable of learning will develop in the future. Needless to say, we are fulfilling our pioneering role in this area too. All our Viega systems are already BIM-compatible.

We fully support the process, providing both the necessary data and expertise. This way, we are playing a key part in ensuring that future-oriented construction based on BIM methodology becomes a game changer for the industry – and does not mean game over.



As a medium-sized family business, we can look back on a success story spanning more than 120 years.

A company characterised by a spirit of innovation, technological expertise and the strong commitment of all those who shape it: our employees, customers and partners.





same time with the strength and foresight of an innovation leader in an industry that bears responsibility for life in the buildings of tomorrow. Agile in our actions, unconventional in our thinking and always committed to the future.

From the German region of Sauerland to the international markets

As one of the world's leading installation technology companies with subsidiaries around the globe, we have managed to preserve the values that set us apart and in so doing have laid the foundations for our success. We now export to 75 countries, develop and produce at ten locations and are therefore helping to shape the future of building technology on all continents.

Respect for the tasks at hand. And for the people

Our focus is on our customers, partners and over 4,700 employees – in other words, all the people who make Viega what it is. As a family company, we offer security and familiarity, attach great importance to long-term perspectives and think in terms of generations, not quarters. We create trust, accept responsibility and base our actions on mutual respect. We do not just communicate these values; every single employee at Viega lives by them.

WE HAVE A LONG TRADITION OF BEING INNOVATIVE.

Anna Viegener and Walter Viegener, Chairs of the Board



A story with a future that is just beginning

When Franz-Anselm Viegener founded the family company in 1899, he laid the cornerstone for Viega's success story. What began back then with the production of beer taps now ensures that buildings around the world provide people today with safe spaces full of pulsating lifelines where they can enjoy a sense of security and well-being – no matter how the buildings are used. Take, for example, the introduction of copper press technology, the invention of the SC-Contur or the innovative use of ultrafiltration technology in the field of drinking water hygiene – Viega is revolutionising the market and will continue to do so.

Standing still is a step backwards

We are not only optimistic about the future, but also full of drive. We want to shape our own future. For us and for future generations. We want to change things. Including ourselves.

Headquarters Attendorn, Germany

Working at Viega makes me proud every day. This is because we are creating something that matters. Something unique. We're working on the lifelines for the buildings of tomorrow.



Looking ahead, it is important to be aware that the conditions we face today will change fundamentally in the next few years. The issues of sustainability and energy efficiency will demand more of us, because in these areas we will need to be proactive, not just reactive. At the same time, digitalisation is making inroads into the construction industry. Typically, this is happening at an ever faster pace. The keyword here is digital building, which will ensure that the cities of tomorrow will be different from the ones we live in today.

We have to reevaluate things with regard to the social, ecological and technological challenges of the 21st century, but most importantly in relation to what people need. And we have to be clear that this will only succeed if we are ready for change.

We have already begun to address this change by restructuring the company. In this process, it was very important that Viega is and remains a family company. However, important decisions can now be made more quickly and Viega can grow more dynamically. This is the only way we can fulfil our obligation to reliably respond to the pressing questions of the future.

How do we deal with the fact that an increasing number of people have to share the same space? What does that mean for the supply and in turn for us as a company that bears some of the responsibility. What do we need to be safe? For hygienic and healthy drinking water? For the management of valuable resources? And of course for the rising demand for energy?

We need to continue to honour our role as a driver of innovation in the industry, but at the same time grow and develop further as a company. We have to raise our sights, look ahead and take responsibility for the future. Everyone for themselves. In their own way. Across all locations. Regardless of whether they are management or trainees. Working in production or in front of the computer. We all have a common goal: to install the lifelines for the buildings of tomorrow.

We are Viega.
Connected in quality.





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