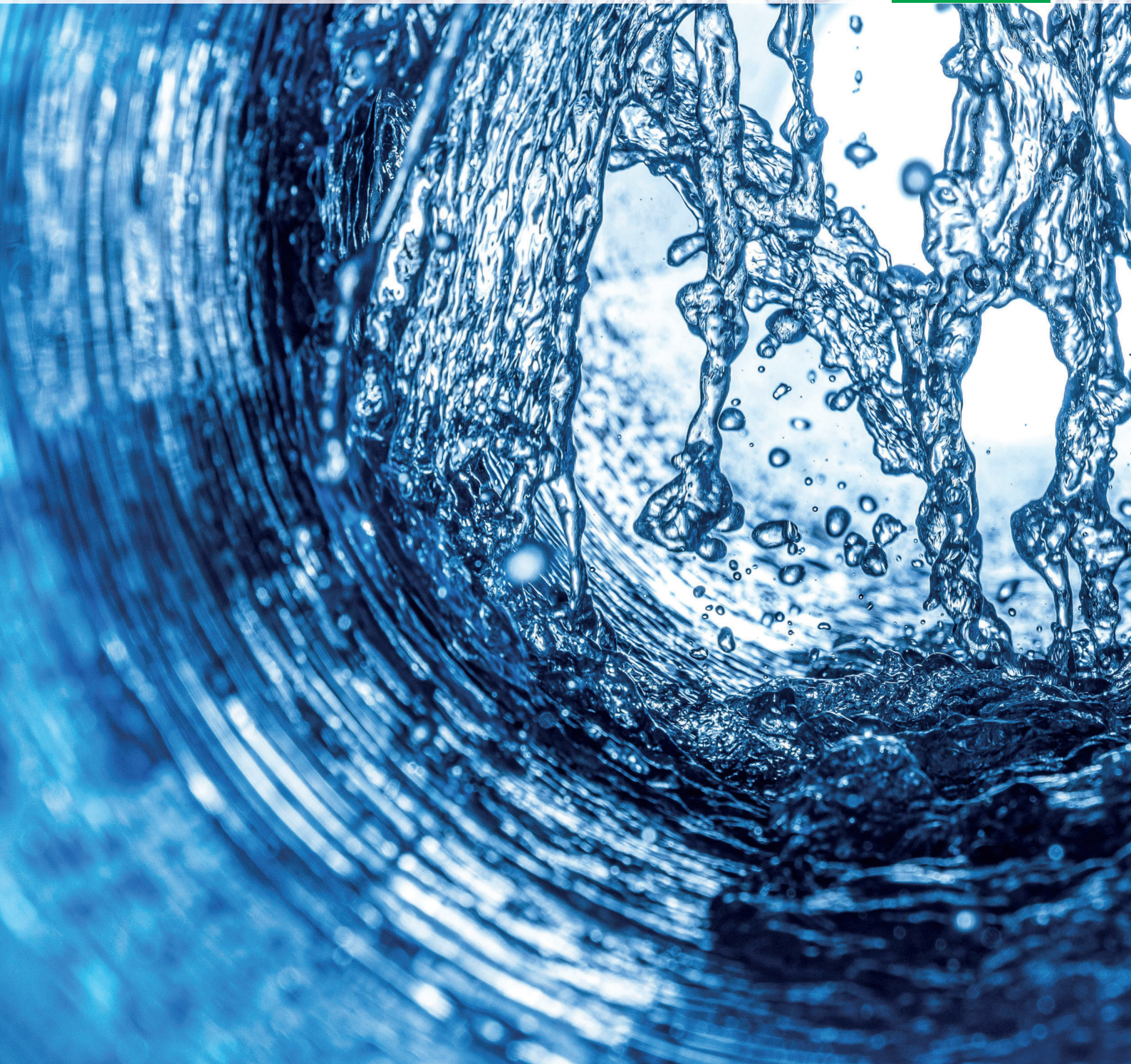


GERMAN WATER AND ENERGY GROUP



EN



”

Our solutions are tailor-made. Every project involves different challenges. That's why we are always there to help our customers personally.“

Markus Hollmann
Managing Director
GWE GmbH

Dear readers,

We have a passion for water – and we've been living that passion for more than 100 years now. From our origins as a simple retail shop, we have grown into a corporation that operates around the world, with national and international locations and subsidiaries.

As a complete service provider for water well construction, we have achieved many milestones. But we don't just rest on our laurels: instead, we work continuously to develop new products and applications that facilitate your daily work on site and make complex project processes more efficient. In world where water is becoming increasingly important, our goal is to make a significant contribution toward efficient water management with our solutions.

But our commitment goes above and beyond this: For many years now, we have been concentrating intensively on geothermal energy as a developer and manufacturer. In light of the incipient energy revolution and the necessity of turning away from fossil energy sources, we are aware of the crucial role that geothermal energy will play in the future energy market. We are prepared to take on these challenges and are here to assist you as a reliable partner.

The key to our success? Our employees! With their passion and dedication, they remain in constant contact with our customers and partners. You can rely on us: whether for product consultation, our wide range of services, training or help with on-site installation. Together, we can find a solution for every challenge.

From hand pumps in Africa to flood protection on the Rhine, we are here for you. Let's work together to shape the future!

Markus Hollmann
Managing Director GWE GmbH

PASSION FOR WATER

We put our slogan into practice every day. With our groundbreaking products and developments, we are helping to shape a sustainable future: that's because sustainability is our top priority. Assisted by our parent company, BAUER Resources GmbH, we work day in, day out to protect and conserve the resources of today and tomorrow.

Our greatest strengths? As a leader in competence and technology, we are highly specialized and offer you an extensive range of products and services from a single source. With the highest reliability and tailored solution systems, we are always there when you need us, even for complex challenges. We attach great importance to quality and always focus on one thing: the satisfaction of our customers.

With our knowledge and experience, we operate successfully around the world. And maybe we'll be in your area someday soon?



”

It is always exciting to experience how a cohesive whole is created from a variety of products.“

< Thomas Wegerich
Warehouse Logistics



”

We work hand in hand. We are only strong together. This is the recipe behind our success.“

< Dennis Heuer
Quality Management



”

There is a lot of passion at GWE. That's something you notice from day one.“

Lisa Frank >
Apprentice
industrial clerk





A JOURNEY THROUGH TIME WITH LOTS OF MILESTONES

1920

GWE's origins begin with a retail store opened by Mr. Boese in 1920 in Hannover, Germany



1953

Purchase of shares and acquisition by Mr. Nelke. At this point, pumps are also included in the product range, resulting in the name pumpenboese

In the 1960s, Gerd Nelke acquired the company pumpenboese from his father and significantly expanded business operations in Burgwedel, Germany

1989

Acquisition of the production facilities in Luckau (Brandenburg) and Nordhausen (Thuringia), Germany

1936

Formation of Schönebecker BrunnenFilter (SBF, Schönebecker Well Screens) as a subsidiary of the company Preussag



PREUSSAG

Production of steel products and specialties such as HAGULIT® and rubber-coated casings at HAGUSTA in Renchen, Germany

Continuous expansion of the product range:
Production of

- PVC well screens and hand pumps
- Landfill dewatering and degassing pipes

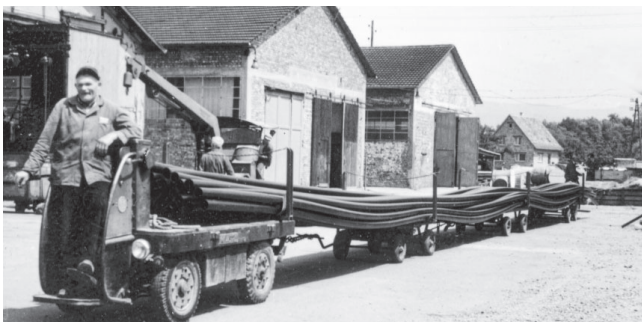
PVC production in Peine, Germany, with the first fully automated production facility, owned by SBF

Initially founded in 1920 by Mr. Boese as a simple retail shop in Hannover, the following years saw pumpenboese (which now included pumps in its product range) develop as a result of Mr. Nelke purchase of shares and acquisition of the company.

At the same time, Schönebecker BrunnenFilter (SBF, Schönebecker Well Screens) was founded in 1936 as a subsidiary of the company Preussag. From the beginning, Preussag opted for in-house production of, for example, well screens, dewatering pipes, and hand pumps. The company HAGUSTA in the city of Renchen was also part of Preussag and was responsible for the production of steel products. After the Second World War, the company's main headquarters was moved to Peine.

In the 1960s, the most influential person in pumpenboese's 100-year history took the helm: Gerd Nelke. He further expanded the company's business operations and it became, with its headquarters in Burgwedel in Lower Saxony, a direct competitor of Preussag. Following Germany's reunification, pumpenboese acquired production facilities in Luckau (Brandenburg) and Nordhausen (Thuringia).

In 1998, an event occurred that had been unthinkable up to that point. The company pumpenboese seized an opportunity to acquire Preussag, their largest competitor. Practically overnight, professional competitors became freshly minted colleagues. The GWE Group was born.



1998

pumpenboese and PREUSSAG Wasser & Rohrtechnik merge to form the GWE Group



Formation of foreign subsidiaries, internationalization, expansion of the project-based business



2024

New location in Krefeld to expand the well and pump services

2007

GWE Group is acquired by BAUER Group and integrated into BAUER Resources GmbH



2020



After the Millenium GWE enlarged their international activities. GWE expanded and subsidiaries were founded both within Europe and beyond. International projects gained increasing importance.

In 2007, the BAUER Group (Schrobenhausen, Germany) acquired the Group. GWE is now an integral part of BAUER Resources GmbH. With backing from the BAUER Group, GWE is in an ideal position to continue making the best possible use of their extensive technical expertise, both now and in the future.



PRODUCTION AND LOCATIONS

Germany



GWE Headquarters, Peine, Germany

Administration, sales, process engineering, central logistics



GWE Nordhausen

Steel and stainless steel manufacturing



GWE Luckau

PVC and PE manufacturing



GWE Krefeld

Well and pump services

Europe and World



GWE Budafilter
Hungary, PE manufacturing



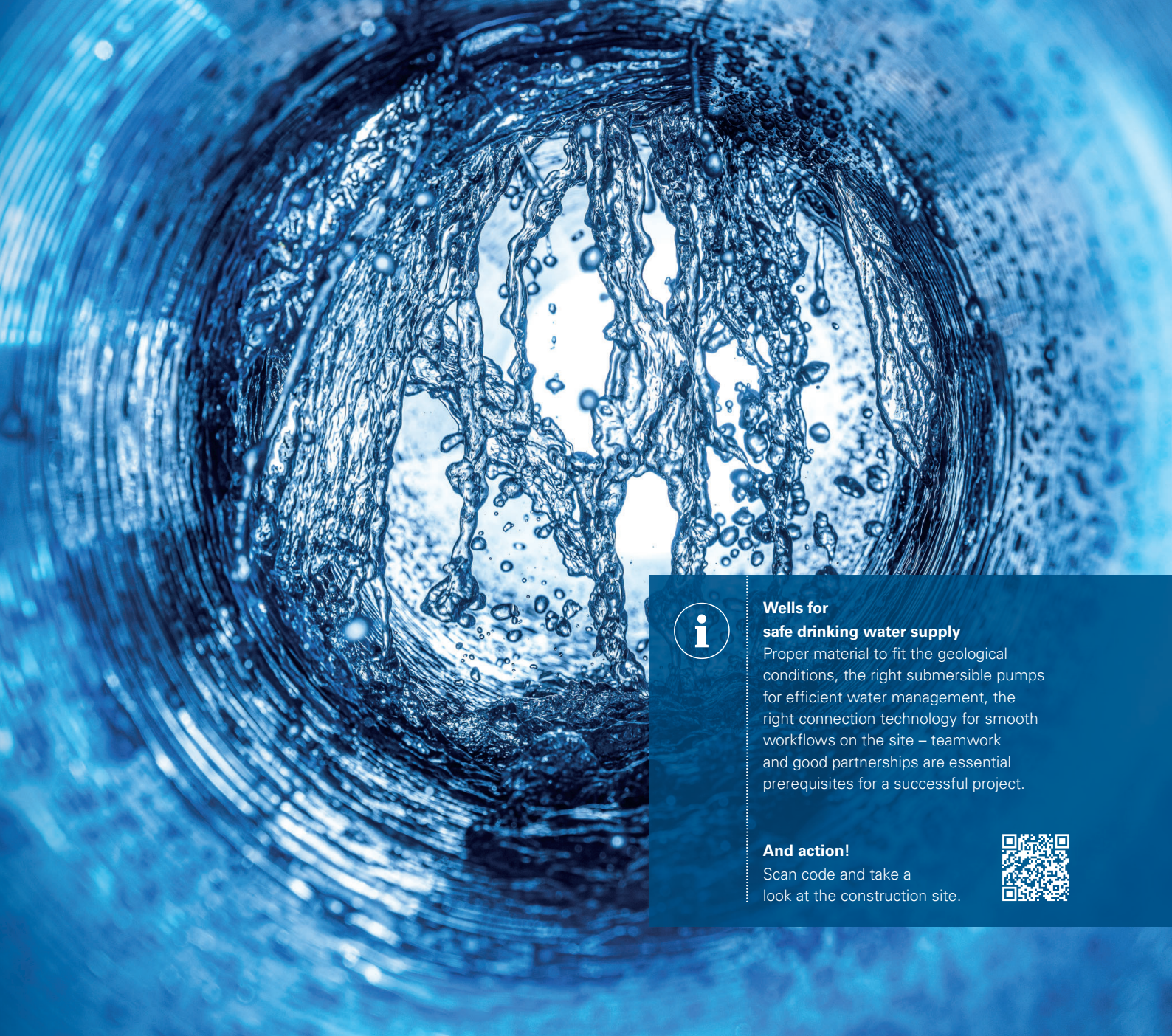
GWE Pol-Bud
Poland, steel and specialty products



GWE France
France, PVC manufacturing



GWE Tubomin
Chile, steel and PVC manufacturing



**Wells for
safe drinking water supply**

Proper material to fit the geological conditions, the right submersible pumps for efficient water management, the right connection technology for smooth workflows on the site – teamwork and good partnerships are essential prerequisites for a successful project.

And action!

Scan code and take a look at the construction site.



WATER WELL CONSTRUCTION FROM A TO Z

During its long-established company history, GWE has developed numerous products for and with the well drilling industry that are not only proven and recognized within the industry, but that have made significant contributions to the continued development of water well construction. Even today, products such as HAGULIT®, GWE Norip® and NORESTA® are still in high demand and used throughout the world.

So far, we have successfully completed more than 50,000 water well construction projects. The challenges always depend on the individual demands of the particular construction project. We are committed to realizing each project successfully using our specialist expertise. We find the best solution for you and implement this together with you.



Skill in design and manufacture

With our wide range of technical expertise in product management and application technologies, along with decades of experience from our production plants, we have excellent know-how that covers the entire project lifecycle. This makes every construction project a success, whether with standard or custom designs!



Complete product portfolio

A well is a complex and sensitive system. We offer a full portfolio with all the models and materials you need from A to Z. As a complete provider for water well construction, we are committed to offering the right solution for every customer.



Variety of applications

Whether for public water supply, industrial use, agricultural irrigation or other areas of application, we have project experience worldwide and our experts can provide you with on-site assistance as needed. The challenges involved with water as a resource are becoming increasingly demanding – we are your reliable partner!

SUBMERSIBLE PUMPS FOR EFFICIENT WATER MANAGEMENT

Our submersible pumps are used around the world. From submersible pumps, emergency pumps in risk areas or hand pumps in Africa, we can offer you the right pump for every application. Our extensive range of pumps as well as our qualified employees enable you to establish safe water management for implementing your project. In our portfolio, you can find pumps for highly efficient water production, innovative solution systems, smart pump technologies, the latest control technology, tried-and-trusted hand pumps and solar-powered pump systems.



Pump design – customized and competent

Nowadays, intelligent tools are often used to design a pump with standard specifications for the operating point based on yield Q and pressure head H . In some cases, however, there are deviations from the standard and specific material properties are required. For energy-optimized projects it is also important to consider the system curve as the intersection of the operating point with the pump curve. With our experience and specialist knowledge obtained from thousands of project orders, we are happy to provide you with personal advice to find the optimal solution for your requirements.

High-efficiency submersible pump systems

By combining efficient GWE stainless steel pump hydraulics and a highly effective stainless steel permanent magnet motor, considerable energy savings are achieved in the entire system. The frequency converter achieves optimal battery performance at all operating points, which leads to excellent partial-load operation. This highly efficient system reduces reactive power and thus the energy requirement as well. We configure these highly efficient solution systems individually for your needs.



The right pump for every application

Applications: Water supply in rural areas, private home water supply, garden irrigation, geothermal energy, water-to-water heat pump, public water supply, industrial use, agricultural irrigation, firefighting systems etc.

Pump size

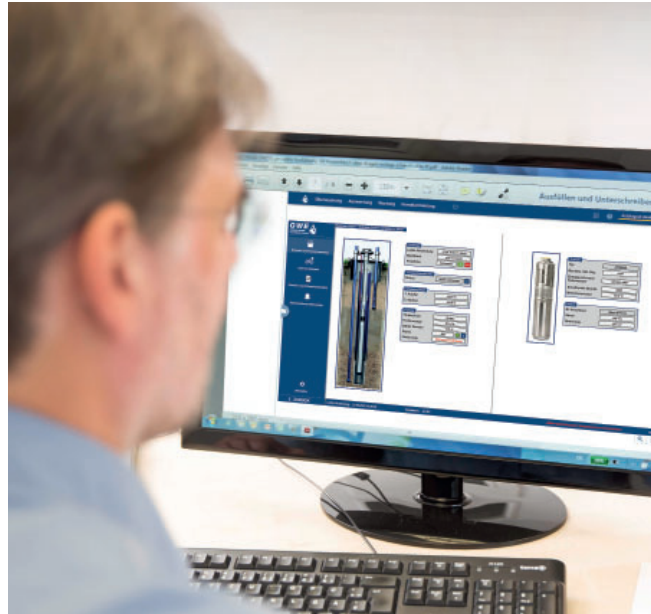
3" to 12"

Yield

up to > 500 m³/h

Pressure head

up to > 950 m



Managing water intelligently

With the GWE Monitoring & Control System (MCS), wells, pump stations, water reservoirs and irrigation systems can be networked easily and managed intelligently using Plug & Play. The MCS enables you to monitor your installations using an app from wherever you are – an easy solution that offers reliable operation.



GEOHERMAL ENERGY – THE ENERGY SOURCE OF FUTURE

More than 6,000 °C – an unimaginable amount of heat. That's how hot our planet's core is.

Near-surface geothermal energy refers to drilling up to a depth of roughly 400 m. There are now millions of heating systems in Germany based on geothermal energy. The trend is growing, and there's good reason for it: Geothermal plants use a nearly inexhaustible energy source, which makes them a key alternative to fossil fuels.

In the age of the energy revolution and turning away from fossil energy sources, the use of geothermal energy is gaining importance. As a manufacturer, we are able to prepare all relevant components for exploitation and connection, and then align them to suit the individual requirements.



Probe systems

GWE geothermal probes are manufactured and completely packaged according to the highest quality standards. Depending on the construction plans, various geothermal solution systems are available. Our perfectly coordinated components are produced in-house and ensure optimal utilization of the available resources. Starting with classic single or double probes for installation depths of 50 m to 200 m, all the way to special solutions with coaxial probes that are used in areas up to 40 m. For depths of more than 200 m, we offer you solutions with FRP pipes.

Geothermal heat distribution technology

Using modern PE welding technology, GWE offers individually designed distribution solutions in varying dimensions. From the compact FixBox for connecting geothermal heat systems with single-family homes, to compact shafts and vehicle-accessible cement distribution shafts, we configure and manufacture a wide variety of products to meet customer needs.





FAR MORE THAN JUST MATERIALS

As a full-service provider for water well construction and geothermal energy, we view our role as not just a materials supplier, but also as a supportive partner who assists you with specialist advice and a variety of services. Each project involves unique, sometimes unanticipated challenges, for which we find the ideal solution by cooperating as partners.

”

As a complete provider for water well construction, we are committed not only to delivering well materials but also to offering solutions throughout the entire life cycle of a well as your partner.“

Markus Hollmann
Managing Director
GWE GmbH

review product queries, work in your specific requests and successfully implement them together in a digital release process.

Stainless steel pickling shop

Pickling is the most important follow-up treatment of welded stainless steel products. Foreign metals, tarnish, slag and scale from previous production processes impede the complete formation of the invisible yet necessary passive layer without which stainless steel is not corrosion-resistant. Pickling in the dip tank removes surface imperfections. The passive layer is only able to form on the pure metal surface under the influence of oxygen from the air.

Pickling is the basic prerequisite that ensures a long service life for our stainless steel products. At our in-house pickling shop, we fulfil all necessary metallurgical and environmental requirements. This process gives stainless steel its value. The quality of our contract pickling shop is highly appreciated by many of our partners.

Flushing service

GWE relies on application technologies that are proven in the field, and offers a flushing service on site. Based on project data, flushing programs are generated. In addition, a range of analysis options are available at the in-house flushing lab. We also offer individual training opportunities pursuant to DVGW W 116.

Design calculations

For complex projects, it is essential to prepare design calculations in advance. This is the only way to reliably determine the right well materials. Each material, each filter and connection type has characteristic properties. Our experts configure your water well construction as a holistic system so that the chosen well materials correspond to your project requirements in terms of the structural design and performance data.

3D design

With the help of 3D design drawings, it is possible not only to quickly visualize customized products in particular, but also to identify and prevent potential incorrect designs. Thanks to our individual design options, we are able to

Pump service

With our specialists in pump service, we are able to perform maintenance and repairs on all submersible pump models. We offer you rapid turn-around times for analysis and repair of your submersible pumps, regardless of the manufacturer. Furthermore, you can use our pick-up service for defective submersible pumps. All relevant performance data for the pump are checked on our calibrated test stand in order to optimize the service life of each unit. We also offer dismantling and assembly of performance systems, pumps, gate valves and control cabinets.

Well service

We offer a wide range of well services. Adapted to all sorts of conditions, in the region around our Krefeld location we offer services such as regeneration, rehabilitation and repair of your wells. Furthermore, with our video inspections we are able to detect well aging and damages at an early stage and derive recommended actions.

Installation service

Special materials also require special treatment. To fully make use of the advantages of GWE products, we offer an installation service on site for a variety of our products. In this way, we can provide practical instruction for your specialist personnel concerning the proper handling of our products and ensure smooth installation.

Training based on W 120-1/2

As a complete provider for well materials, GWE offers comprehensive training in the areas of well materials, submersible motor pumps as well as flushing and sealing technology. Training can be designed on a custom basis, and oriented depending on the depth of knowledge for trainees, foremen, masters or engineers. Apart from in-house customer training, GWE also sends specialists to hold lectures and courses at external training locations, to conferences organized by specialist associations or directly to customers.

*Pump test run on our
calibrated pump test bench*





Well service



Stainless steel pickling shop



What sets us apart:



Top quality
Established and groundbreaking solutions with a maximum commitment to quality



Technical expertise
The highest technical expertise for absolute reliability



Individuality
Individually coordinated and holistically developed solution systems for complex challenges

FROM CHALLENGES TO SOLUTIONS

Over the course of the company's history, GWE has successfully completed more than 50,000 well drilling and geothermal heat projects. The challenges always depend on the individual demands of the particular project. Along with technical product requirements, the geology, environmental

influences and local environment can make any project unique. The applications range from public water supply and industrial use all the way to unusual large-scale projects. Efficient water and energy management is required worldwide due to climate change and the energy revolution

*Hand and solar pump projects in Africa, 1984 – today:
The first GWE hand pumps were sold in Sudan in 1984.
Since then, over 39,000 pump systems have been sold.
In cooperation with various non-profit organizations, the
water supply, particularly to villages in many arid regions
of Africa, was improved in the long-term.*

More than

39,000

hand and solar pumps
in use worldwide



Expansion of the water supply for Las Vegas

2016-2019:

Lake Mead provides the water supply to Nevada's desert metropolis Las Vegas. The reservoir supplies roughly 40 million people. Yet due to extreme droughts, the water level has fallen continuously, resulting in the need for a low-water pump station with a total of 32 pump stations to maintain the water supply to the desert city and its inhabitants. For this enormous project, GWE developed (by means of Finite Elements Method modeling), produced and delivered the required stainless steel riser pipes (DN 800) and wellheads (Ø 800 mm).



Flood control projects,

since 2019:

Flood control has assumed an increasingly important role, in water well construction as well as elsewhere. Particularly along larger rivers such as, e.g., the Upper Rhine or the Danube, various flood control measures are necessary. GWE has developed specially adapted well systems, in many cases with very large dimensions (stainless steel wire-wrapped screens DN 1200), to provide a targeted reduction in groundwater levels in the event of a flood.



DEWA project for water supply in Dubai,

since 2023:

With a gigantic well field of 542 wells, the Arabic emirate of Dubai aims to secure its water supply in the event of a crisis. For this purpose, water is stored at a depth of 70 m in a natural interstice below the desert and can be extracted as needed. GWE is supplying 960 double-walled filters for this project.

READY FOR THE FUTURE

As a leading manufacturer and developer in the well drilling industry, GWE is positive about the future in a variety of aspects. That's because we know from past experience that, in particular, the high level of technical expertise exhibited by our employees, coupled with their passion for the topic of water, is highly respected within the industry. We will continue developing successful solutions together with our customers and partners.

One crucial step for the future is continuous expansion and improvement of our services. With our solutions, we aim to make your daily work on site easier, get rid of obstacles and react as flexibly as possible to your requirements.

Furthermore, digitization is a key topic for well drilling as it is elsewhere; here, it takes the form of "smart pumps" and networked well systems. Challenges such as flood protection, urbanization, high-efficiency pump technology and efficient water management are the tasks that will drive the branch forward – today and in the future.

Another central component for us is the energy revolution. Efficient use of geothermal energy for heating and cooling is becoming increasingly relevant. That's why our specialists work continuously to develop solutions for using geothermal heat even better and more effectively. In this way, we do our part to advance the energy revolution.

Our promise for the future: We have a passion for water!





Irri360°-AgriSystem

Efficient irrigation for farming – from the spring to the root!

We offer you an irrigation system adapted to the specific site, from planning to commissioning.

Find out more!

Scan the code and improve your water efficiency!





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