



Tradition in Changing Times

Imprint

Publisher Gebrüder Heyl Analysentechnik GmbH & Co. KG

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Concept and text Berthold Budde, Dortmund, Germany: www.budde-medien.de

Layout and reproduction vogelsang-zander, Dortmund, Germany: www.vogelsang-zander.de

Cover design and event logo agenturspezial, Braunschweig, Germany: www.spezial-kommunikation.de

Translation Ashley Marc Slapp, Berlin, Germany: www.tac-translation.de

Images Heyl archive, Studio3 and Thorsten Hasse, Gronau, Germany: www.t-hasse.de (pages 5, 11, 16, 20, 26, 28, 29, 30, 31, 32, 33)

Print Ruth Printmedien GmbH, Braunschweig, Germany

Printed in Germany, 2008

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Dear Reader,

»Everything originated in water and everything is sustained by water«, wrote the celebrated German poet Johann Wolfgang von Goethe.

Water has now been our element for 50 years. In 1958, my uncle Hans-Jürgen Heyl founded Gebrüder Heyl KG in the German town of Hildesheim together with his cousin Hans-Joachim Heyl. Thanks to innovative products and strong customer orientation, the two founders established a global reputation in the field of industrial water treatment and water analysis. 50 years later it

makes me extremely proud and grateful to build on their achievements and to continue in their spirit.

The Heyl family has been involved in business for generations. This unique publication will look back on this history and the story of Gebrüder Heyl Analy-sentechnik. It combines the tradition and principles of our company with our latest products and services and provides an insight into our future.

A company's great achievements are a result of many small ones. But even the best results can only be achieved

with mutual commitment, deep-rooted quality consciousness and a real sense of responsibility as well as the unfailing dedication of everyone involved.

It takes experienced, highly motivated and qualified employees to always provide our customers with the very best. These employees are the heart and soul of our company. I wish to express my heartfelt gratitude to all of them during this anniversary year.

Expertise, courage, endurance and determination enable you to be successful in many business ventures. New

opportunities for improvements and innovations will always arise.

I hope that we will always recognise and make the most of these opportunities for the benefit of our customers.

Yours faithfully,

Jörg-Tilman Heyl



300 years of business tradition

For almost 300 years the name Heyl has been synonymous with quality and innovation in German business circles, especially in and around Berlin. The Heyls in Hildesheim are also descendants of this extensive family.

Shipping and trade

The name Heyl first appeared in Berlin registers on 21 September 1597. A man named Jürgen Heyl married Gertraud Buschler in the parish of St. Nikolai. It was stated that Jürgen and his brother Peter Heyl lived from »river shipping and trade«.

Another Heyl was mentioned in 1623 in the »Chronicle of Seehausen« (south of Prenzlau): Jürgen Heyl's son, Michael, married Gertraud Krusemark. On 4 October 1636, in the middle of the Thirty Years' War, he died at the Battle of Wittstock (Brandenburg) fighting Swedish forces.

Beverages and colonial goods

Almost one 100 years later, in 1735, the cobbler Michael Heyl (1701–1763), a great-grandson of his namesake, who died at the Battle of Wittstock, founded a brewery in Spandau.

His mercantile success enabled his sons to become official citizens of Berlin: Johann Jacob Heyl (1725–1775) already owned a retail shop near the Berlin Palace at the age of 24. In 1765, his younger brother, Joachim Christian Friedrich Heyl (1741–1789), founded the trading company »J. F. Heyl & Co« located in Potsdamer Strasse (later Leipziger Strasse).

He supplied the leading gentry of the day with exclusive goods: Game fish from northern Germany, pheasants from Bohemia, champagne from Rheims, sherry from Xerez and chocolate from Vienna. Various materials and paints as well as painting equipment were soon added to the assortment. In 1771, this renowned merchant was presented with

a brand new building in Charlottenstrasse by »cabinet order« from Frederick the Great, King of Prussia.

After the death of his brother Johann Jacob Heyl, Joachim Christian Friedrich called himself Johann Friedrich Heyl. He died just a few days before the start of the French Revolution in July 1789. His son, Ernst Friedrich Heyl, acquired sole proprietorship of the buildings in Leipziger Strasse and Charlottenstrasse from his brother Carl Ludwig in 1799. In 1809, Ernst Friedrich Heyl, a merchant of materials and spices and owner of »J. F. Heyl u. Cie.«, became a member of the Berlin city council assembly. One year later he became »Gilde-Ältester der Kaufmannschaft und Handlungs-Compagnie zu Berlin« at the tender age of 41.

Paints and chemicals

The next generation of Heyls opened a new entrepreneurial chapter. In 1833, Ernst Friedrich Heyl's son, Ernst Eduard Heyl (1797–1871), acquired a plot of land for the production of paints and chemicals in Charlottenburg on the

banks of the River Spree. The company soon employed 500 people. Before his death, Ernst Eduard Heyl entrusted the paint sector to his sons, Richard Friedrich (1830–1898) and Georg Friedrich (1841–1889), which they operated from 1865 onwards as »Gebrüder Heyl & Cie.«. After the death of their father, Richard retired from the business. Georg continued to run it on his own and turned the paint factory into a public limited company.

»The Kitchen ABC«

In 1869, Georg married Hedwig Crüsemann (1850–1934), the daughter of a Bremen shipping merchant. She became a famous social politician and founded the first Berlin school of home economics in 1884. Her book »ABC der Küche« (The Kitchen ABC, 1888) contained practical tips on housekeeping and recipes reflecting the latest nutritional science findings.

Spring water sales

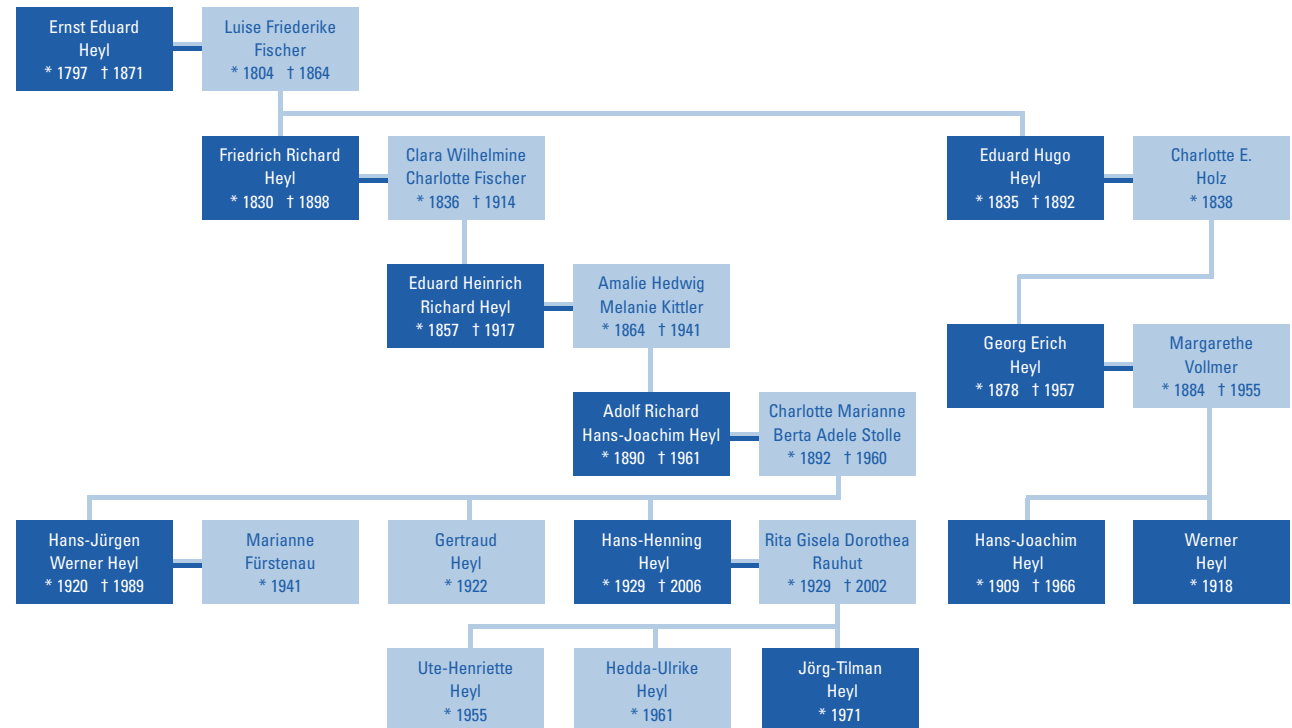
In 1865, the parent company, i.e. the material shop including spring water

sales in Charlottenstrasse, was taken over by Carl Otto Heyl (1827–1879), the eldest son of Ernst Eduard Heyl.

Chemistry and pharmacy

In the other branch of the Heyl companies, the death of Hedwig Heyl in 1934 also meant the last direct family influence on the paint company. A grandson of her brother-in-law and former co-owner Richard Heyl, the physician Dr. Werner Heyl (1891–1974), founded the »Chemisch-pharmazeutische Fabrik Heyl & Co., Berlin« in 1926. In 1958, two partners left and decided to found their own company at the branch office in Hildesheim. This new company is the focus of this 50th anniversary publication: Gebrüder Heyl Analysentechnik GmbH & Co. KG.

The descendants of Ernst Eduard Heyl







[Two men, one idea]

Starting up their own successful business also meant giving up their old roles: On 4 February 1958 (backdated to 31 December 1957), the two cousins Hans-Jürgen and Hans-Joachim Heyl resigned as partners of the chemical-pharmaceutical factory Heyl & Co. in Berlin. The main reason was fundamental differences of opinion about the direction of the business. The two cousins then founded a new company in Hildesheim.



Hans-Jürgen Heyl



Hans-Joachim Heyl

In Hildesheim, Heyl & Co. – a pharmaceutical company founded by Dr. Werner Heyl in Berlin in 1926 – owned premises at Orleansstrasse 75b. Hans-Jürgen and Hans-Joachim Heyl took on these premises as well as a few employees and machines in order to try their hand at business. The founders each took one of their brothers on board as further business partners: Dr. rer. oec. Hans-Henning Heyl and Dr. med. Werner Heyl, the brother of Hans-Jürgen Heyl and Hans-Joachim Heyl respectively. The new company in Hildesheim was named »Gebrüder Heyl Chemische Fabrik KG«.

Hans-Jürgen and his cousin Hans-Joachim were the general partners. They incorporated the part of the old company which they had received from the distribution of assets of Chemisch-pharmazeutische Fabrik Heyl & Co. in Berlin into the new business. Hans-Henning and Werner Heyl were limited partners in this new venture.

True to the family tradition

The company's name Gebrüder Heyl followed a long tradition dating back to 1833 with Ernst Eduard Heyl's paint factory and had played a leading role in German business circles for almost one hundred years.

The two cousins now had the ideal basis to create a new production facility, but they had yet to decide on a production range. What should they actually produce? Which markets were available to them? What were their competencies? Who and where were their customers? Questions which required quick answers.

*»A leap into
the unknown...«*

Hans-Jürgen Heyl

Nonetheless, the two astute entrepreneurs soon found the right solutions. At first they produced pharmaceutical products for Africa, including penicillin drugs. The product range in those early years of Gebrüder Heyl KG also offered dentistry products.

From Berlin to Hildesheim

»Even as a child he loved inventing things.«

Dr. Gertraud Reeps, nee Heyl, about her brother Hans-Jürgen Heyl

From the very start Heyl produced a product which would become a perennial favourite: Durognost®, an easy-to-use instrument for determining water hardness. This product led the fledgling company in a completely new direction.

A groundbreaking discovery

The born inventor Hans-Jürgen Heyl, who as a child had built his own radios, benefited from a chance discovery which he put to good business use: Between the numerous objects stacked on the laboratory shelves stood a forgotten jar of reagent for a good six months. A reagent is a substance used to monitor a chemical reaction or state. Chemical reactions are often displayed by a change in colour. Much to the surprise of everyone, the reagent stored at the Hildesheim laboratory was still fully functional after half a year. In a newspaper interview almost 30 years later, Hans-Jürgen Heyl explained his amazing discovery:

»According to the literature it just wasn't possible. The reagent should have decomposed after just a few days. We decided to analyse the individual ingredients and subsequently developed a reagent which had a shelf life of up to two years.«

That was in 1960, a milestone in the company history. Heyl applied for a worldwide patent for the new, liquid reagent. The Durognost instrument was



Durognost® – as modern today as 50 years ago

the first successful product developed by Heyl in Hildesheim. In 1958, the business operations of Gebrüder Heyl KG were detailed as follows while registering the Durognost® trademark at the West German Patent Office in Munich:

»Pharmaceutical products, chemical products for medicinal purposes and healthcare, pharmaceutical drugs, plasters, dressings, pesticides, disinfectants, agents for increasing the shelf life of foodstuffs; chemical products for commercial, scientific and photographic

purposes, extinguishing agents, hardening and soldering agents, casting compound for dentistry purposes, tooth filling materials, mineral raw products, products for determining water hardness, especially boiler feed-water.«

The founding years of Gebrüder Heyl KG started a trend which was to continue for the subsequent decades: Patent applications and renewals, the definition of new property rights and trademarks and the assertion of these rights when dealing with global competitors. Besides the Durognost® trademark application at the West German Patent Office in Munich, September 1958 also witnessed the registration as an international brand at Bureau international pour la Protection de la Propriété industrielle in Berne, Switzerland.

The first patent-protected Testomat® instruments were developed in cooperation with the Hildesheim-based company Otto Otto. They were used to automatically monitor water hardness and worked with the liquid reagents developed by Heyl. With these instruments, Heyl ushered in a completely new era in



The first patents of
Gebrüder Heyl KG

»Soft water is required almost everywhere. For example, zero hardness is required for dialysis. Our instruments with our reagent measure water hardness automatically.«

Hans-Jürgen Heyl

industrial water treatment. At the beginning of the 1960s everyone in the industry suddenly became interested in water hardness.

Companies soon realised the benefits of soft water. For example, their pipelines and hot water generators were better protected against calcification, thus providing a longer service life. The Testomat® instrument from Heyl for determining water hardness soon became a must-have product.

The number of international sales of Heyl products was now gathering momentum. By September 1958 Heyl had signed an exclusive agreement with

Copenhagen-based H. Struers Chemiske Laboratorium for the sales and marketing of Durognost® in Denmark. The following years saw numerous other sales collaborations for Durognost® and Testomat®, for example in Great Britain and Spain.



Background information: German Water Resources Act

The German Water Resources Act came into force on 1 August 1957 and was amended several times during the years until 2006. The scope of the application of the act encompasses the protection and use of surface waters and groundwater, the development of waters and water management planning. Certain usages must be officially approved. The most important usages are water withdrawal, introducing and discharging substances into surface

waters, retaining and lowering surfaces waters, removing, extracting and channelling groundwater as well discharging substances into groundwater.

The Act was fundamentally altered in 2002 in the course of Member States transposing the EU Water Framework Directive into national legislation. Water resources management is now organised according to river catchment areas. The German federal states and neighbouring countries now work in close cooperation to monitor adherence to the regulations.



Advertising leaflet and user manual
from the 1960s



[Success with branded products]

Throughout the 1960s and 1970s Heyl enjoyed continued economic growth. With numerous new national and international patents, continuous product improvements and production and sales agreements, Heyl was not only able to consolidate its market position, it actually expanded it. At the end of the 1970s, two decades after its foundation, Gebrüder Heyl KG was stronger than ever.

Patents and brands

For almost the entire first twenty years Gebrüder Heyl KG focussed on patent procedures and the protection of its own brands. In 1962, Heyl was awarded a patent in Great Britain for its liquid reagent used to measure water hardness and together with the Hildesheim-based company Otto Otto a patent for the production and sales of Testomat® instruments which automatically monitored

water hardness. Patents for the all important US market followed in 1964 and 1965. Patents for »Durognost«, »Duroval« and »Testomat« products were awarded throughout the 1960s in the Anglo-American world, in almost every western European country as well as further a field, e.g. in Japan and South Africa.

However, the patents were continuously under attack. For example, in

1965, a Japanese company launched a reagent which Heyl's patent agents judged to be a »very crude imitation« of »Durognost«. And a patent dispute with a pharmaceutical company lasted well into the 1970s. Quite often Heyl defended its patents with further and new developments and new industrial property rights.

Successful products for the world

»Durognost« and »Testomat« – these two brand names represent the first successful Gebrüder Heyl KG products to sell in great numbers in the 1960s.

»Durognost« combined reagents for monitoring and testing soft water – as a liquid or in powder form. Heyl's goal was to develop a method with which customers could carry out water analysis quickly, easily and safely outside the laboratory. For example, when testing



water hardness, the included measuring tube was filled with the water sample, which was then gradually filled with reagent tablets until the colour changed from red to green. The number of required tablets determined the total hardness, the residual hardness and/or the pH-value. The laboratory technician test case, weighing approx. 3 kg and not much bigger than a normal briefcase, was a fully equipped portable laboratory with all the instruments and reagents necessary for analysis.



Fig. left: Heyl conquers the Anglo-American market: Patents from Great Britain (1961) and the USA (1964)

Fig. top right: Laboratory technician test case for on-site water analysis, Durognost® test kit, 1960

From 1961 onwards, Heyl revolutionised water analysis with a small instrument for the automatic continuous determination of residual hardness. It was received with great interest by companies and institutions with continuous soft water requirements which had to satisfy the ever increasing process water quality demands. The Testomat instrument made complex manual tests a thing of the past. Fully automated and reliable monitoring of the required water was carried out at defined intervals. Hardness dips were immediately indicated via an alarm signal and could be corrected accordingly in no time at all.

Heyl continuously improved its successful products for determining water hardness and developed numerous versions during the subsequent years. Today, Durognost® and Testomat® as well as many other Heyl products are as popular as ever at home and abroad.



Fig. from left to right: Chemical and administrative building in the 1980s, Orleansstrasse 75b, entrance to Montoirestrasse 6 in Hildesheim with adjacent production facility

Cooperation, sales and marketing

In 1960, Heyl entrusted the Cologne-based Gesellschaft für automatische Wasseraufbereitung mbH (GAWA) with the sales and marketing of Testomat instruments in order to push up sales. During the first year of cooperation sales rocketed to new heights. This cooperation lasted until 1967, after which time Heyl choose to conduct the sales and marketing of its Testomat products and purchased a one-third participation share in GAWA. Two further shareholders held the other two thirds. Gebrüder Heyl Chemische Fabrik KG was renamed »Gebrüder Heyl Kommanditgesellschaft für Analysetechnik« in 1965.

In the pharmaceutical sector, Heyl had been cooperating since the early 1960s with Philips-Duphar from Hamburg, which rented a building at the Hildesheim site. Together the two companies produced pharmaceutical products, particularly for the veterinary sector. To enhance this business, »Gebrüder Heyl Chemische Fabrik GmbH« (Chemo-Heyl) was founded in 1962 with Hans-Joachim Heyl as the CEO. This new company operated from the premises in Orleansstrasse and Montoirestrasse.

Gebrüder Heyl, which was now considerably smaller and primarily operated in the field of industrial water treatment, relocated to rented premises at

Hindenburgplatz in the centre of Hildesheim.

However, Hans-Joachim Heyl felt uneasy with this situation of being just another cog in the big Philips wheel and decided to return to Gebrüder Heyl KG in 1965. This was the same year that a new office complex was constructed for the company at Orleansstrasse 75b. Philips-Duphar continued to rent the two older buildings.

Hans-Joachim Heyl died suddenly and unexpectedly in 1966. He left a huge gap in the company which required lots of »hard work« to close, said Hans-Jürgen Heyl, who was now alone at the helm. The long-serving notary of

Heyl, Walther Erhardt, sent a letter to Hans-Jürgen Heyl describing his deceased cousin as an »accomplished and enthusiastic entrepreneur, active and committed businessman and a man who always lent a helping hand«.

Quality and customer satisfaction

From the very start, quality was Hans-Jürgen Heyl's top priority. He was an inventor and dynamic businessman whose goal was to improve the quality of Heyl products and to provide his customers with the best possible result.

He explained proudly that certain customers had once defected to a competitor in an attempt to cut costs, but had returned a few months or a year

later due to the quality of his products. And if in the unlikely event that a customer became dissatisfied, Heyl ensured that a specialist or a field service partner was sent to provide rapid and customer-friendly help. This helped the company establish a unique reputation amongst its customers and was the basis for long-lasting successful business partnerships.

Sound basis for business

During the 1970s, Heyl continued with its expansion strategy. In 1973, the company purchased the shares of the Düsseldorf-based Henkel Group in GAWA and subsequently held the majority. Gebrüder Heyl KG now operated



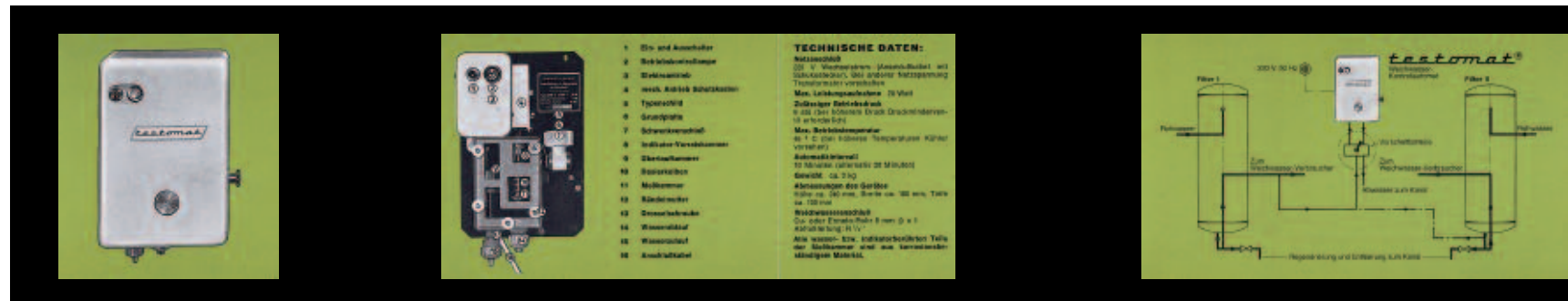
GAWA mbH in Kerpen-Türnich

almost exclusively in the field of industrial water treatment. Heyl decided to terminate the rental agreement of GAWA in Cologne and constructed a new building at its own premises in Kerpen-Türnich. GAWA relocated to this site in 1974.

In the meantime, Testomat instruments from Heyl had generated world-

wide interest. Agencies were set up in numerous countries, e.g. in Great Britain, the USA, Spain, Italy, France, the Netherlands, Belgium and Switzerland. Automated softening plants were now in big demand from the water treatment industry. And Heyl developed programming units and controllers to satisfy these increasing demands. The range of water testing instruments also continued to grow.

The premises in Hildesheim were now starting to burst at the seams due to the major expansion of the instrument range and water chemistry. The old, single storey part of the building in Montoirestrasse was demolished and replaced with a large modern building.

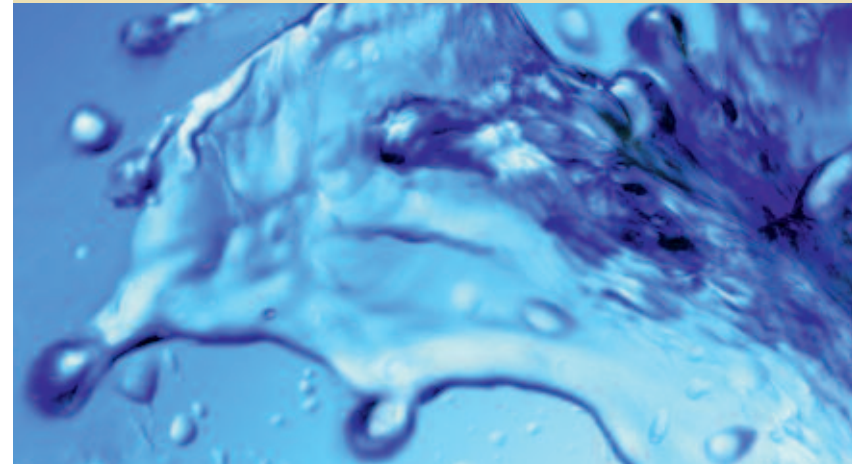
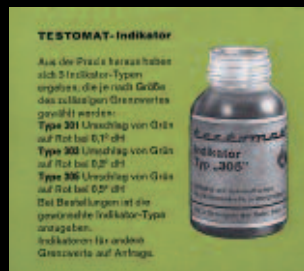


Work commenced there at the end of 1978 and the employees profited from the new machinery and state-of-the-art workplaces. Modern workplaces, qualified and motivated employees as well as high-quality products and services – that was Heyl's recipe for success.

Even during this period of exceptional growth Hans-Jürgen Heyl still relied on a sound business strategy, as described in his 25th anniversary review in 1983:

»In spite of large investments, we always aim to work rationally, thus ensuring we have sufficient reserves which will allow us to keep our company financially healthy even in times of general economic stagnation.«

Testomat® advertising brochure from the 1970s



Background information: Environmental protection

Environmental protection suddenly became a key issue in the 1970s. The first United Nations environmental summit was held in Stockholm in 1972 with representatives from more than 100 countries. The delegates agreed upon a plan of action for the environment and development with recommendations for its implementation. For the first time countries recognised the need for cross-border cooperation when dealing with environmental and

nature conservation issues. Water pollution control also became the focus of attention. For example, the River Rhine and River Neckar in Germany were highly polluted in the 1970s and had dangerously low levels of oxygen. Today, after intensive measures to improve the water quality, both rivers boast almost drinking water quality, as do most German rivers. Using Heyl reagents it is possible to quickly and cost-effectively determine the chemical-physical composition of water on site without extensive specialist know-how.





[**Quality and service on principle**]

Since the 1980s, Gebrüder Heyl Analysentechnik has concentrated on the continuous improvement of products and dedicated customer service. The death of the company's founder Hans-Jürgen Heyl in 1989 meant the end of an era. However, the new growth strategy based on acquisitions under the new leadership at the end of the 1990s did not succeed and resulted in later corrections.



Silver anniversary

1983 marked the 25th anniversary of Gebrüder Heyl Analysentechnik. Founder Hans-Jürgen Heyl wrote down his thoughts on the company's positive development during the first 25 years. During those years Heyl had built a reputation nationally and internationally as a quality brand for water analysis. The then 63-year-old Hans-Jürgen Heyl looked back with pride on just how far Heyl had come and promised to work

»intensively for the company now and in the future«.

Patents and product improvements

Numerous Heyl patents which had expired after 20 years were renewed in the 1980s. Heyl profited from a 1983 amendment to the German patent law which particularly related to the reversal of the burden of proof for chemical products. This meant that the assertion of claims from process patents was considerably easier for Heyl.

Strict customer orientation was a hallmark of Gebrüder Heyl KG from the very start. This also meant reacting quickly and flexibly to customer requirements. At the request of various end users, Heyl researched the development of automated water softening plants in the 1980s. Customers were no longer interested in individual instruments, such as Testomat®, but desired fully automated plants which were durable, quick and only required occasional servicing by trained staff.

In 1982, Heyl was awarded a patent for its »process for the cyclic regenera-

tion of water softening plants«. It included exchange material in a treatment tank and regenerating agent in a storage tank. According to the patent specification the program-controlled water softening plants, which regulated the time intervals and water quantity, ensured »hygienic and cost-effective operation with minimum environmental pollution«. Industrial property rights were applied for in a number of countries.

A few years down the road and Heyl instruments were already operating with microprocessor controllers. After a cer-

tain flow rate, the controller triggered regeneration of the single filter softening plants. The quantity was calculated automatically after entering the filter size and the raw water hardness. Regeneration could also be triggered at fixed daily intervals or at the push of a button. Other control systems developed by Heyl were used as conductivity measuring instruments for monitoring water purity, for example for full desalination and osmosis plants, in laboratories, for automated sewage water monitoring tasks or desalination controllers.



Heyl-publications from the 1980s

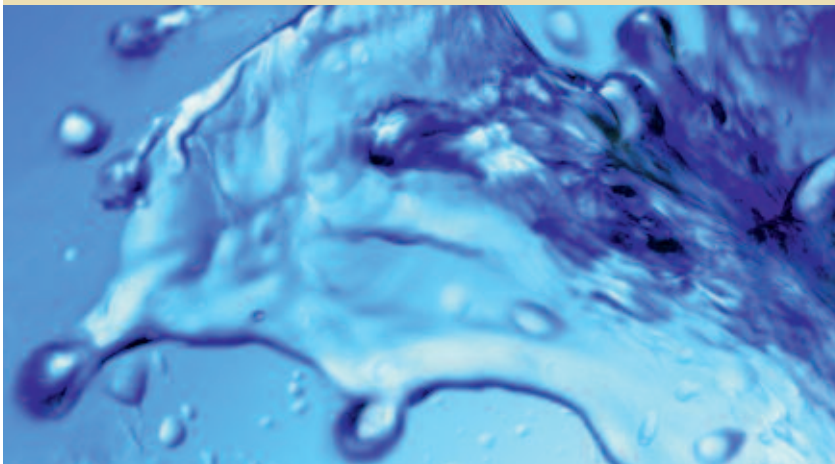


Nano filtration plant with integrated Testomat® instruments and Softmaster® controllers in a Dutch food processing company

Death of the company's founder

Hans-Jürgen Heyl, who suffered a stroke in 1986, died aged 68 in April 1989. For the past 30 years, ever since the foundation of the company, his name had stood for the quality of Heyl. With business and sale partners around the world, reliable instruments and rapid delivery times, Hans-Jürgen Heyl had used his innovative and astute business skills to guarantee that Gebrüder Heyl Analysentechnik was firmly established in the water analysis sector.

After Hans-Jürgen Heyl's death, his widow, Marianne Heyl (*1941), who had been involved in the company since 1965 and had gained first hand experience of her later husband's business processes, took over the reins of Gebrüder Heyl KG (until 1996). The sales and marketing of Heyl products were expanded in cooperation with GAWA in Kerpen. Outward expansion, especially in former eastern-block countries, and strict inward cost management ensured rising annual profits.



Background information: New markets in the east

On 9 November 1989 the Berlin Wall came down and the borders which had divided East and West Germany were breached. Within just a few months a peaceful revolution had swept through Eastern Europe clearing away the communist orthodoxy and replacing it with democratically elected governments. Companies from the West soon recognised the opportunities in East Germany and Eastern Europe. Gebrüder Heyl KG also profited from these new mar-

kets in the 1990s. And it was not long before the partially reckless neglect of the environment became visible and the improvement of water quality became a top priority. Heyl expanded its industrial property rights to incorporate numerous eastern European countries (e.g. Macedonia, Romania, Czechoslovakia and Hungary) and offered the emerging economies of newly democratic countries affordable water analysis products.

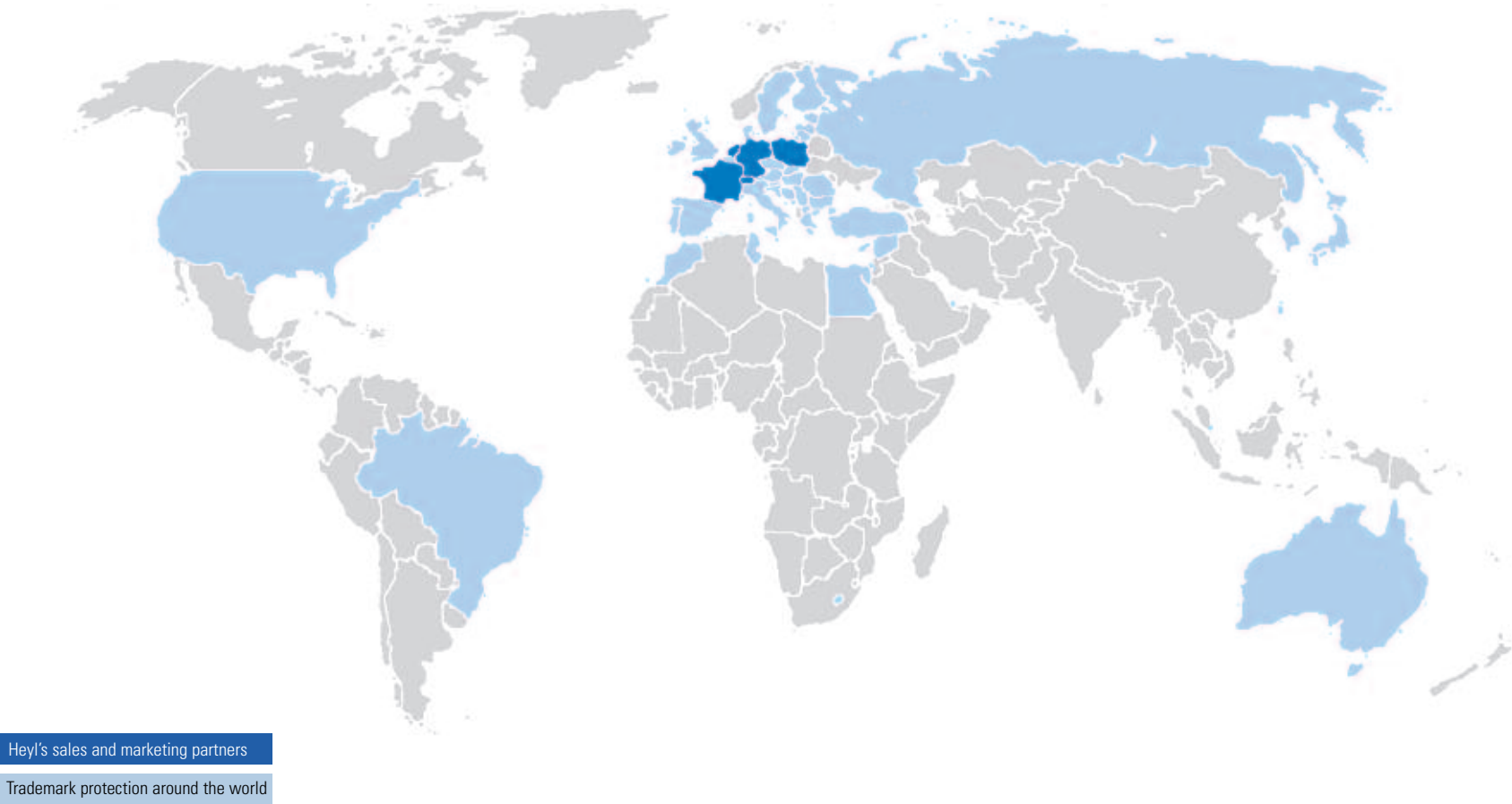
Expansion and diversification

In keeping with a general economical trend at the end of the 1990s, the new Heyl management under the leadership of Wolfgang Hamburger counted primarily on acquisitions to ensure growth. In 1997, GAWA was taken over by Gebr. Heyl Analysentechnik GmbH & Co. KG, whose legal form had in the meantime been modified. GAWA had already increased its business division's capacity to incorporate plant construction and plant maintenance (sales of drinking water and after sales maintenance) in Egypt. One year later Heyl purchased AWATEC AG based in Horgen near Zurich, Switzerland. This company operated in the sewage sector and mainly offered standard plants for industrial and operative process water cleaning.

It was hoped that the acquisition of these two companies would more or less cover the entire water treatment sector and provide significant synergy effects for sales, production and administrative tasks. The name »Heyl Group« symbolically underlined this expansion strategy. At the end of the 1990s, Gebrüder Heyl

Analysentechnik GmbH & Co. KG had subsidiaries and interests in France, Italy and Poland as well as sales and marketing partners in Belgium, the Netherlands, Great Britain, Spain and South Africa.

However, the often expensive new acquisitions did not have the desired economic impact and soon put strain on the company's liquidity. Jörg-Tilman Heyl (*1971), a nephew of the company's founder, has been head of Gebrüder Heyl Analysentechnik and leading the company with a new future-oriented strategy since 2001. He draws on the classic strengths of the company, relying on development and production within an international network and utilising logical and modern marketing and sales strategies.







[**Water is our element**]

High-quality products, rapid delivery times, customer satisfaction and friendly professional relationships are the basic principles of the internationally-operating Gebrüder Heyl Analysentechnik GmbH & Co. KG. And these principles help to further develop the cutting-edge products and services as well as support further staff training.



Milling of a BOB measuring chamber block

Inner strength – competence network

Water is Heyl's element. The name Gebrüder Heyl Analysentechnik has stood for exceptional solutions in the field of industrial water treatment since the foundation of the company in 1958. This includes analysis, control and measuring instruments as well as test equipment.



Measuring chambers for the Testomat® BOB instrument series

Heyl attaches great importance to the reliability and long service life of its products. And the company has even adapted the supply of spare parts to the long service life of its instruments. Last but not least, Heyl develops and produces all its own products in order to satisfy its own extremely high quality demands. Sales and marketing are carried out by the company's subsidiaries

or qualified contract partners. This guarantees an extremely high level of service. The company has always believed in listening to the wishes of its customers and finding the best solutions together.

Since the late 1990s, when it became evident that the investment and acquisition growth strategy was not bearing the desired fruits, Heyl has once

again focussed on its »inner values« and strengths. In the meantime, the company has sold its various acquisitions. The product range of the newly founded »Gebrüder Heyl Vertriebsgesellschaft für innovative Wasseraufbereitung mbH« includes ozone generators and UV plants. And further product lines are on the way. The parent company now offers contract development and manufacturing as additional services.

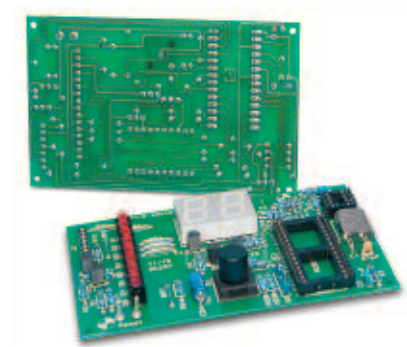
The management team believes in safeguarding the company's inner strengths, particularly by expanding development, marketing and sales. Making the company strong from the inside means making it fit to meet potential external challenges, such as economic downturns, market crises and social, economic and political shifts.

To achieve this goal, Heyl has built up an efficient network. This includes close cooperation between specialists in France, the Netherlands, Switzerland and Poland to name just a few. The company's long-term goal is to have at least one sales and marketing partner in every country.

The development department has already been expanded and will continue to be so in the near future. The field of research will be built on and around the core business of industrial water treatment and analysis in order to exploit its full potential. And networking plays an important role here too: Cooperation with professional partners is intended to further strengthen research and development and result in effective motivation. The plan is to also broaden already successful training courses and seminars. Lively exchanges between employees and course participants will lead to further research and development impulses. This creates fertile ground for all areas of the network to interact with each other.

Flexibility and innovation

Flexibility and rapidness guarantee growth and innovation. Heyl develops intelligent analysis instruments, controllers and measuring units for industrial water treatment which help to reduce costs, to provide optimum utilisation of water and to operate plants



PCB component placement for DOSIclip® (top)
Softmaster® motherboard on the solder wave (centre)
PCB of an MMP10 controller (exclusive product for WWS AG, bottom)

correctly and flexibly. Today's technical product range offers modular instruments for water softening, reverse osmosis, filtration and desalination as well as for measuring various parameters, for example iron, conductivity, pH-value and redox. Heyl combines the proven reliability of its products with new functionalities and improved handling.

Heyl sees itself more and more as a competent service provider of individual, tailor-made applications which meet the highest requirements. This is particularly the case for food and process engineering, industrial processing, the pharmaceutical and chemical industry and hygiene. Heyl offers fully operational modules for the said sectors which function individually or in combination with other components:

- Online analysis instruments for various water parameters
- Universally programmable controllers with diverse interfaces
- Remote maintenance controllers and analysis instruments
- Customer-specific reagents and laboratory-independent test kits
- Mobile analysis systems with laboratory quality
- Decentral visualisation, data storage and quality management.

As a supplier of water treatment products, Heyl's development, production and sales focus on the relevant plant engineering companies. Thanks to its network of subsidiaries, contractual partners and authorised dealers, who all share Heyl's view, the company can provide local presence in various markets. Together with its customers, Heyl is building a global partner network which provides plant operators with twenty-four-seven service and maintenance.

Reagents and analysis

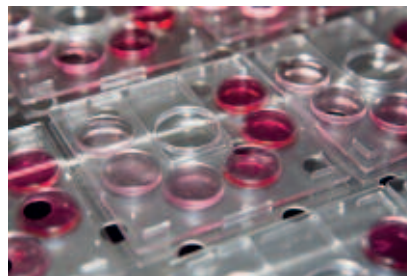
Reliable and cost-effective methods are indispensable for detailed water analysis. The methods developed by Heyl allow on-site analyses without knowledge of chemistry and laboratory equipment – mobile, safe, fast and cost-effective.



Duroval® titration solution

The reagents Testoval® and Duroval® as well as Testomat instrument reagents can be used for industrial water treatment, swimming pools or swimming pool technology, drinking and process water, breweries, the drinks and food industry and on dialysis wards in hospitals.

Heyl offers all the required reagents in a portable laboratory case for boiler water monitoring. This portable laboratory contains all the reagents necessary for the statutory monitoring of boiler water and boiler feed-water as well as all the necessary accessories for sampling and sample preparation. Heyl also provides



Testoval® chlorine colour comparison plate

necessary individual analysis groups for other portable water analyses, for example for electroplating, monitoring of osmosis plants, aquariums or various sewage water monitoring tasks; ensuring customers can carry out their own on-site tests.

Instruments and components

A water treatment plant is only as efficient and reliable as the components which operate it. Gebrüder Heyl Analy-sentechnik produces high-quality instruments and the fully qualified personnel offer extensive services at an outstanding cost-performance ratio.



Reagent A of Testoval® Phosphate®

Testomat 2000® – the classic instrument

For the past 50 years Testomat® instruments from Heyl have been an indispensable part of reliable water hardness measurements when monitoring water softening plants and protecting downstream plants and processes. They detect operating and plant faults and ensure

improved utilisation of the softening plant, thus reducing costs. The statutory requirements for complying with water quality can be adhered to without expensive services.

Over the years, Heyl has continuously improved its Testomat® instruments. Reliability, long service life, high measuring accuracy and low-maintenance operation serve as a yardstick for innovations. The latest generation of this internationally successful series, Testomat 2000®, offers easy operation and extensive control functions, also in conjunction with other Heyl products, and numerous other functions and properties.

By varying the software and selecting different reagents, the standard Testomat 2000® instrument can become an online analysis instrument for determining water hardness and other parameters. Furthermore, control and dosing tasks can be carried out directly from the instrument due to the elaborate electronics. Various options for new standard applications are available at a favourable price.



Testomat 2000®

Practical experience always offers new ideas which result in new Testomat® developments.

Softmaster® – computer control

The Softmaster® controllers have a modular design. The basic PCB has several digital inputs and outputs whose functions are determined by the corresponding software. Two plug-in cards can be additionally controlled via fur-



Softmaster®

ther analogue or digital inputs or outputs. The controller PCB is equipped with a rewritable flash memory on which the software is »installed«. If functions have to be altered, the software can be simply adapted. The controller can be connected to a computer via a serial interface or a programming module »Flash-Link« in order to carry out software updates. The controller housing is a combined housing suitable

for both wall mounting and installation in a switch cabinet door. Operation occurs via a membrane keypad. The full text display guides users through an intuitive operating menu. The Softmaster instrument range with its standardised hardware replaces the controllers of older instruments.

EcoControl – systematic measuring

The EcoControl series is a new process measuring system from Gebrüder Heyl Analysentechnik. EcoControl LM or EcoControl pH in combination with a suitable conductivity probe allows users to determine the conductivity or pH-value of aqueous media.

Two independently programmable limit value contacts are available for various monitoring and control tasks. Up to 200 measuring values can be stored with the time and date in a ring buffer. The availability of the last 200 measuring results is, therefore, always guaranteed. The microprocessor controller EcoControl DO 10 controls quantity-based desalination and dosing for cooling systems and air-washer plants.



EcoControl LM

Individual development

The engineers and technicians at Gebrüder Heyl Analysentechnik provide high-quality contract development and manufacturing for chemical and technical applications. Customers specify their requirements – Heyl meets them quickly, efficiently and precisely.

One of Heyl's top priorities is data confidentiality and granting customers guaranteed exclusive rights to these products.

Customer services

If questions regarding products or their application and operation arise, Heyl offers the best customer support, for example via a technical helpline. Experienced employees handle orders, order processing and complaints.

To familiarise customers with instrument operation, Heyl offers training courses and seminars for its products. The one-day events are held at the company's headquarters in Hildesheim. It is also possible for customers to organise local training courses in cooperation with their respective national or international sales partner.

Our employees – the heart and soul of the company

Ever since its foundation, Heyl has always attached great importance to fully qualified and highly motivated employees. Many of today's 40 employees have been working for the company for many years – continuity which pays dividends.

Long-serving, experienced employees make it easier to establish trusting



Roland Grahn at a CNC milling machine

and lasting relationships with customers. Heyl provides the ideal customer support for each individual concern. The members of the customer service team are experienced and accomplished in their respective fields and up-to-date and well informed. They will always find the perfect solution for each and every enquiry – committed, target-ori-

ented, extremely cost conscious and always at the customers' service.

In an ever faster changing global economy, all company employees must be committed to lifelong learning. Heyl provides training for its employees. For example, from the middle of 2006 to the end of 2007 the company was involved in the further training project »Trapez« promoted by the German Federal Ministry of Economics and the European Social Fund. It offered workers, in particular women, in small and medium-sized companies the opportunity to gain additional qualifications alongside their daily work – from special computer courses and electronic component trai-



Elisabeth Rupprecht at a labelling machine

ning to the promotion and improvement of foreign language skills, which are becoming more and more important in an internationally oriented company such as Heyl. The goal is for each employee to participate in further training at least once a year.

The employees are the most valuable asset and the heart and soul of the company. They have helped to shape the history of Heyl during the past 50 years and contributed greatly to its success. They have stuck with the company through thick and thin. Their skills and personal commitment guarantee success



Margitta Wollmann sealing Duroval® drop test kits

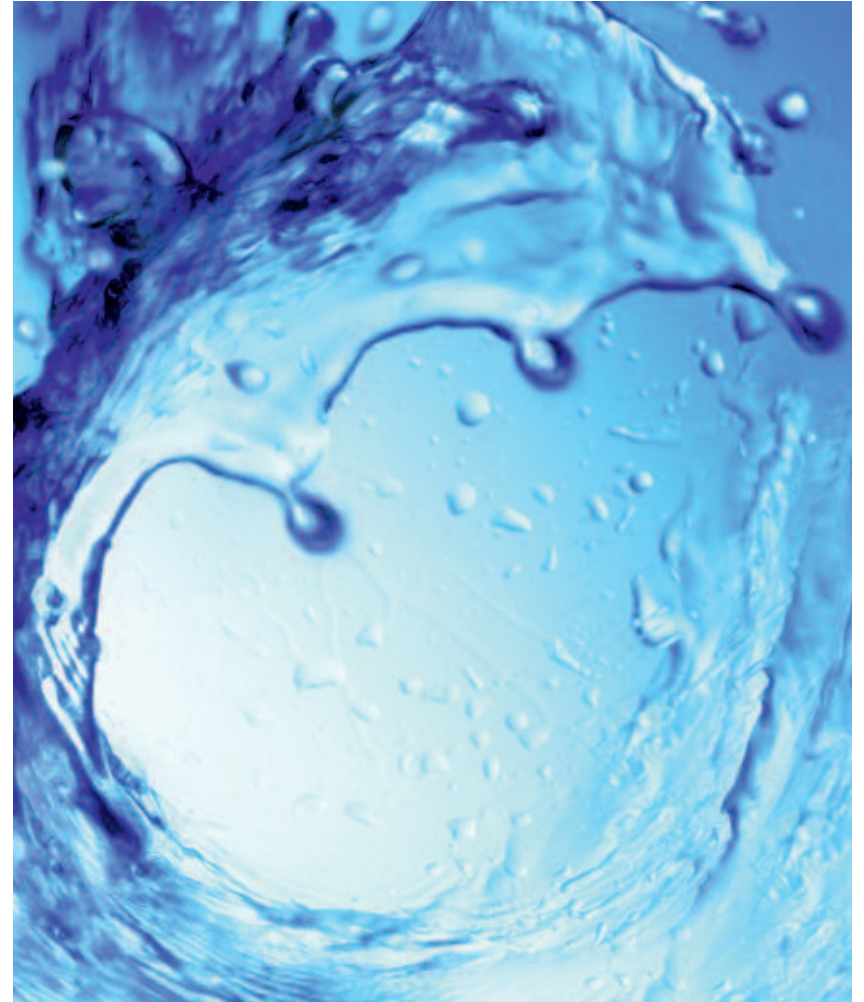
for Heyl, and the management will continue to rely on their ability in the future.

Looking to the future

Heyl is ready for the future. High-quality products, a clear corporate strategy with real customer centricity and committed and qualified employees are the foundations upon which the company will thrive in the future.

Growing competition in all product areas and flexible solutions in a global economy demand high levels of concentration and dedication from everyone. With its international network, Heyl has created an excellent basis to come out top in a world of increasing competition thanks to the coordination of varied competencies.

Competition offers companies numerous opportunities to further improve their strengths, implement them successfully and to win new customers. To recognise, take and use these opportunities is a challenging yet fulfilling task. The management and employees of Gebrüder Heyl Analysentechnik wish to repay the incredible loyalty of its partners and customers with new products and improved services. Heyl looks forward to a bright future full of optimism and zest for action – a future which it will shape.



Companies of the Heyl Network

Sales:

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Email: info@hey-l-france.fr

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Fax: +31 (0) 74 2 91 53 50
Email: info@prowater.nl

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