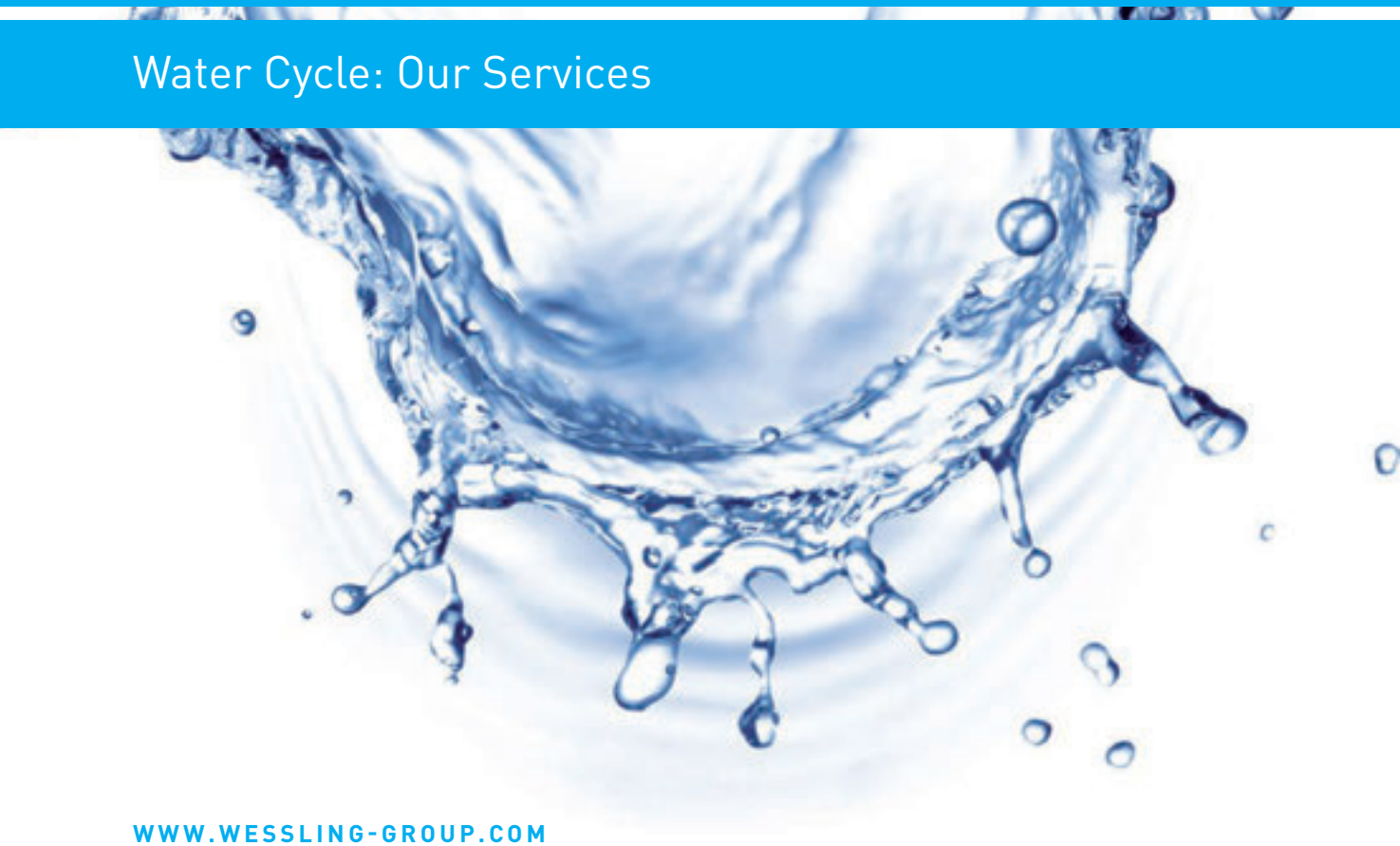
WESSLING
Quality of Life

Water
Consultancy, Analytics and Planning

Water Cycle: Our Services



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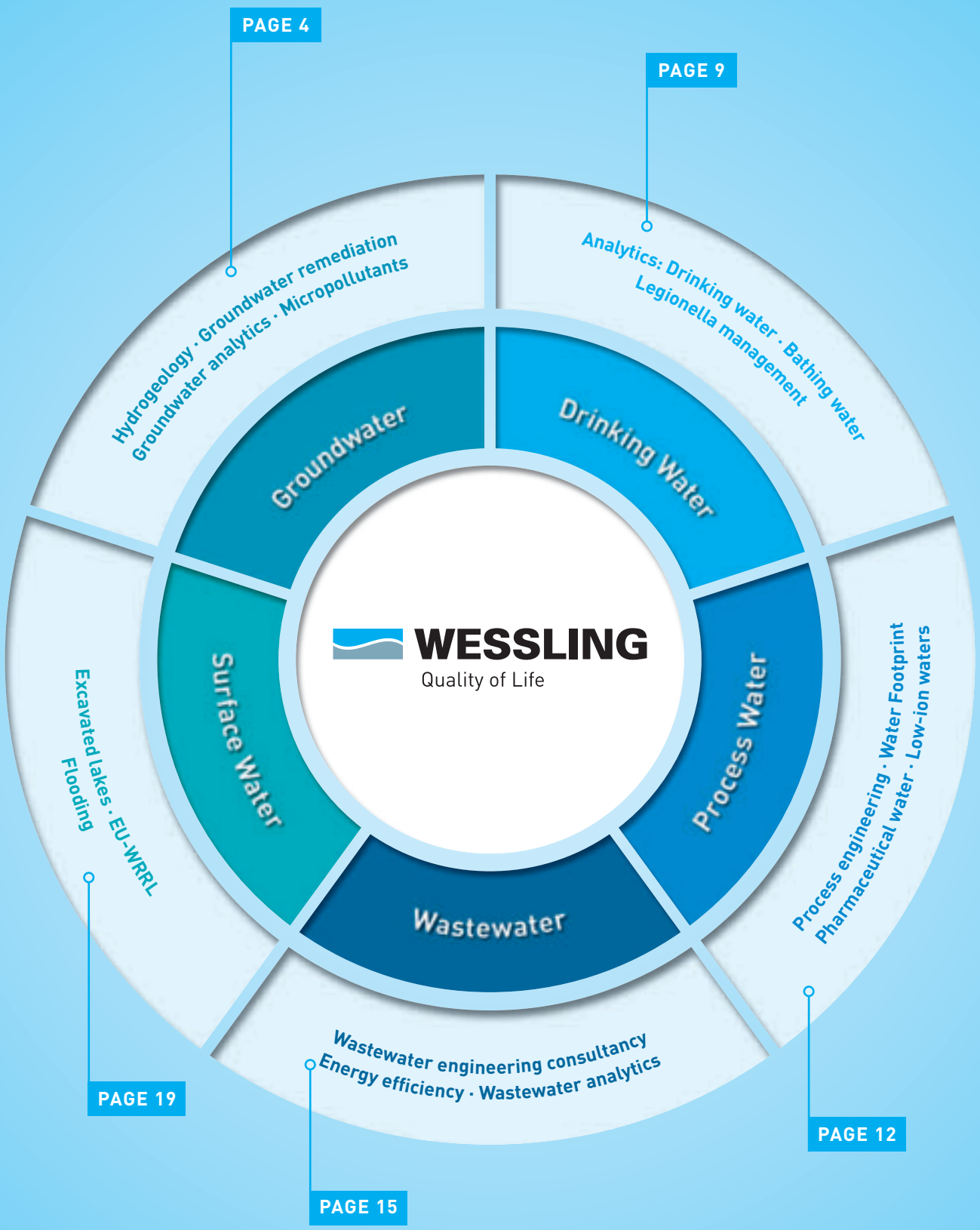

PAGE 4
PAGE 9
Hydrogeology · Groundwater remediation
Groundwater analytics · Micropollutants
Analytics: Drinking water · Bathing water
Legionella management
Groundwater
Drinking Water
Surface Water
Process Water
Wastewater
WESSLING
Quality of Life
Excavated lakes · EU-WRRL
Flooding
Process engineering · Water Footprint
Pharmaceutical water · Low-ion waters
Wastewater engineering consultancy
Energy efficiency · Wastewater analytics
PAGE 19
PAGE 12
PAGE 15

Customer-specific solutions from a single source

Up to 70 per cent of the Earth is covered by water. The bulk of this water is salty seawater, however. Once it has been extracted, usable fresh water – only around three per cent – is used in day-to-day life and for the manufacture of countless products.

Clean water is in limited supply, however, and the quality of this resource is also at risk from external influences. Regular checks are therefore made to assess the purity of groundwater and surface water supplies; polluted water supplies must be treated and returned to the hydrological cycle.

We offer our customers made-to-measure solutions in every aspect of the water cycle. We work in close collaboration with clients to develop solutions that are specially tailored to their requirements. Customers benefit in many ways from the wealth of expertise in 40 different disciplines in the WESSLING Group.

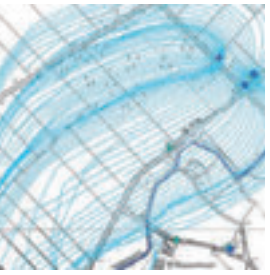
We support water supply companies and industrial enterprises in a number of ways, for example by monitoring groundwater, seepage water and surface water. We also draw up hydrogeological surveys and applications for water rights. We plan and implement remedial and preventative measures for bodies of water that are polluted or at risk (as a result or past, present or future use of surface supplies, for example).

We carry out chemical, physical and microbiological tests as required under the German Drinking Water Ordinance (TrinkwV), e.g. as "incoming goods inspections" in food companies, at waterworks outflows, at end consumers, for users with their own water supply and for construction companies.

The wastewater arm also has plenty to do: checks on direct and indirect dischargers, plans for wastewater utilisation and disposal, process engineering and analyses in sewage treatment plants and many more.

In order to ensure that research findings are meaningful, WESSLING offers you a system that provides seamless reliability from the sampling process to the test results. We have designed special WESSLING boxes for the transport of samples. These boxes allow water, soil and other specimens to reach our laboratories in an unadulterated state. You receive reliable results right on schedule – and you can also use our online customer login for this if you wish.

Hydrogeology



The volume and the quality of our water resources are variable quantities that essentially depend on the underground hydrogeological conditions in the water catchment area. All the requisite data are collated, assessed and documented in our hydrogeological surveys and site analyses. These are a repository of information and, at the same time, the basis for future planning designed to safeguard and increase production capacity and for drawing up water rights applications.

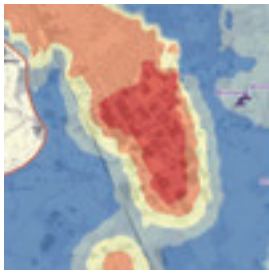
Depending on the degree of complexity, modern software is used to deal with hydrogeological questions. This includes geographic information systems (GIS) to analyse and visualise spatial data, as well as special software for the three-dimensional modelling and visualisation of groundwater flow and material transport. Among other things, this makes it possible to forecast the need for intervention in the hydrological balance by means of water extraction. A huge number of measured values accumulate wherever water analyses, water level measurements, borehole drilling and such like are carried out on a regular basis. Without any further manual processing, we convert the analysis data directly from the internal Laboratory Information and Management System via interfaces into a groundwater management system. The client thus receives a customised database, in which all the information of key relevance to water management is regularly updated.

From consultancy and analytics to planning, WESSLING offers its customers a comprehensive package of services relating to hydrogeology and water extraction from a single source.

Our services

- Hydrogeological surveys
- Site analysis and monitoring concepts
- Development of groundwater supplies
- Preparation of applications for water rights and tracking of authorisation procedures
- Development and operation of monitoring networks
- Groundwater modelling
- Compilation of water management databases and regular updating of customer-specific data
- Use of geographic information systems (GIS) to create thematic maps and overviews (hydrogeological maps, groundwater quality, digital terrain models etc.)
- Rainwater use and infiltration

Groundwater remediation



Our customers benefit from 30 years of extensive experience in the surveying, assessment and remediation of groundwater damage. We have applied our know-how in cases of groundwater contamination covering small areas and expanses of several square kilometres alike.

It is essential to carry out an accurate survey of hydrogeological conditions and the spread of contaminants before remediation can begin. Our experts will choose the most suitable remediation strategy. It is common practice to use a mixture of techniques (e.g. Pump & Treat with microbiological processes). We are unaffected by supplier interests and will present the most cost-effective solution.

In certain cases, the processes of natural attenuation occurring underground are sufficient to prevent the further release of harmful substances. There is no need to take active measures in such circumstances. We have acquired extensive know-how in the field of natural attenuation from handling research assignments as well as a large number of projects.

Long-running water remediation schemes often have high optimisation potential. We recognise this and will use it to complete this kind of work for you more quickly.

Our services

- Damage survey (detailed examination and remediation study)
- Survey and assessment of natural attenuation
- Feasibility studies incorporating innovative techniques (e.g. in-situ chemical oxidation (ISCO), microbiology, surfactants, nano-irons, immobilisation)
- Groundwater modelling (flow and material transport)
- Re-evaluation of long-running groundwater remediation measures
- Cost efficiency analysis
- Preparation of remediation plans in compliance with Federal Soil Protection Act (BBodSchG).
- Remediation planning, call for tenders, site management
- Expert monitoring of remediation work
- Project management
- Preparation of reports/statements by publicly appointed and sworn experts in compliance with Article 18 Federal Soil Protection Act

Groundwater analytics

The regular monitoring of extracted groundwater and raw water is essential in order to guarantee that drinking water is of impeccable and consistent quality.

WESSLING checks the quality and standard of groundwater within the framework of federal state guidelines for raw water before it is treated to become drinking water. To do so, it uses state-of-the-art analysis techniques to detect the presence of harmful substances such as pesticide metabolites and pharmaceutical residues. It is also essential to monitor factors of relevance upstream of water production (e.g. nitrate levels), in order to safeguard the sustainability of supplies. This upstream testing of groundwater is guaranteed by a suitably adapted monitoring concept, which is developed in close collaboration with the customer and the relevant supervisory bodies.

The extraction of representative groundwater samples is of vital importance in every testing programme. WESSLING is duly accredited and qualified to take samples. Special equipment can even be used to take groundwater samples from a depth of up to 150 metres. WESSLING provides groundwater sampling with online support to record statistics. A computer program logs all the relevant data, including pH levels, electrical conductivity, temperature, lowering of the groundwater table and the volume of water pumped off.

Our services

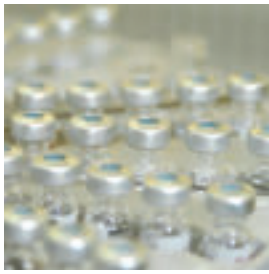
SAMPLING

- Use of duly adapted sampling systems with groundwater measuring points up to a depth of 150 metres
- Sampling system with online support
- Collection and in-situ purification of potentially polluted groundwater by mobile purification units

ANALYTICS + CONSULTANCY

- Full spectrum of the microbiological and chemical parameters of the German Drinking Water Ordinance (TrinkwV)
- Wide-ranging portfolio of micropollutant analysis services
- Range of over 350 different herbicides and biocidal products
- Assessment of test findings based on local and national legislation

Micropollutants



The increasing use of substances such as drugs and additives in food and industrial products, cosmetics and pesticides is causing more pollution in bodies of water (groundwater and surface water alike) from which drinking water is produced.

High-quality groundwater is the most important resource for public drinking water supplies, as well as a crucial raw material for the production of food. Production processes must also meet very high standards of quality. The availability and quality of water are factors of growing importance when it comes to site location.

Organic trace elements are becoming increasingly significant in terms of safeguarding drinking water production and in the light of the EU Water Framework Directive. The new European groundwater directive will also ensure that these substances remain in the focus of the general public and of water suppliers.

WESSLING offers a special comprehensive service for the analysis of organic trace elements. Our high-resolution measuring devices can be used to reliably detect many of the following substance groups in the nanogram range:

- Drug and hormone residues
- Radiocontrast agents
- Herbicides and their degradation products (metabolites)
- Complexing agents (e.g. EDTA, benzotriazole)
- Flame retardants
- Softeners
- Petrol substitutes
- PFC (polyfluorinated compounds)
- Organozinc compounds
- Nonyl- and octylphenols
- Sweeteners
- Priority substances under the EU Water Framework Directive

It is to be expected that new compounds requiring particular attention will arise continually in the future. Our laboratories are flexible enough to respond swiftly in such cases and to develop new methods of testing.

DRINKING WATER – FOOD NO. 1

Drinking and bathing water analytics

Drinking water must always satisfy the high criteria for food and of the German Drinking Water Ordinance (TrinkwV) and be available in the highest possible quality. Drinking water must be free of pathogens, colourless, odourless, taste acceptable and not be harmful to health.

We are accredited to carry out sampling and analytics and our laboratories are listed as drinking water test centres in compliance with the requirements of Article 15.4 of the amendment to the German Drinking Water Ordinance (TrinkwV) dated 3 May 2011. This is a reflection of the many years of expertise to which you have recourse at WESSLING. This know-how benefits a large number of sectors, including water supply companies, the food industry, public authorities and the property business.

The samples are taken by our duly qualified and experienced specialists in compliance with the relevant guidelines. This is a prerequisite for meaningful and reliable analysis results. If required, WESSLING's experts will handle a project from start to finish, all the way from selecting suitable testing points and drawing up sampling schedules to passing on test data to the responsible authorities. Water in public and commercial indoor and outdoor swimming pools also has to undergo regular testing. The relevant health authorities define the scope and dates of testing in accordance with DIN 19643-1. These tests may relate to the water in the pool itself as well as clean water, filtrate and fill water. Tests are carried out on bacteriological parameters such as pseudomonas aeruginosa or legionella and chemical parameters such as nitrate or volatile trihalomethanes (THMs).

Our services

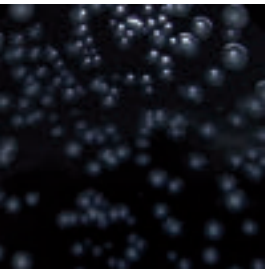
SAMPLING

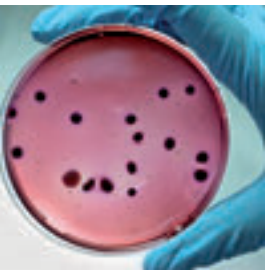
- Use of duly adapted sampling systems (random and direct sampling, stagnation samples, sampling in hot-water systems)
- Sampling of self-sufficient water supply facilities
- Sampling of bathing water

ANALYTICS + CONCULTANCY

- Full spectrum of the microbiological and chemical parameters of the German Drinking Water Ordinance (TrinkwV)
- Micropollutants
- Range of over 350 different herbicides and biocidal products
- On-call service
- Evaluation of test findings
- Authorities management

Legionella management





Legionella are naturally occurring bacteria that can develop anywhere in fresh water, as well as in tap water pipes, hot-water heating systems, air conditioning systems with spray humidifiers and spa baths.

The operator of a plant for the distribution of running water with a large-scale water heating installation that dispenses tap water within the scope of commercial – as opposed to public - activity must now test the water supply system for legionella every three years to comply with the 2012 amendment to the German Drinking Water Ordinance.

Only public buildings such as schools, hotels and hospitals were previously required to conduct such tests. Even apartment buildings are now covered by mandatory inspections if they have hot-water installations with volumes in excess of 400 litres or hot-water piping containing more than three litres in at least one pipe between the outflow of the water heater and the extraction point (large-scale plant). Countless property owners, landlords and managers are affected by the new ordinance.

Sampling must be carried out in line with "DIN EN ISO 19458 Water quality – Sampling for microbiological analysis". The DVGW (German Technical and Scientific Association for Gas and Water) worksheet applies to sampling points. In the case of the aforementioned water heating systems, samples of tap water from the hot-water flow pipe, the return pipe and every ascending pipe must be tested for legionella.

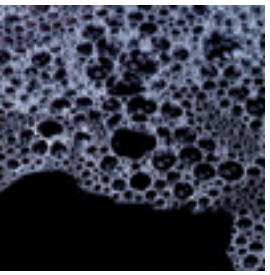
In certain circumstances, the humidifier water used in ventilation and air conditioning systems must be tested for legionella every two years as part of the VDI 6022 hygiene inspection. Recooling plants are also subject to regular legionella testing.

WESSLING is a competent partner for all aspects of legionella management. The services of our qualified and accredited samplers are available nationwide. WESSLING's specialists will also provide assistance with risk assessment and, if required, the planning of any necessary measures.

MAXIMISING WATER EFFICIENCY- MINIMISING RESOURCE CONSUMPTION

Process engineering

Water constitutes a vital manufacturing component in many industrial enterprises without becoming a product itself. It may be used in the form of washing water, as a means of transport or even for cooling purposes. Quality standards are often high and the properties and condition of this process water are required to be equally high. This is attributable to a number of different factors, be it the regulations for operating specific equipment and machinery or the need to guarantee optimal product quality.



Individually defined water parameters must be continuously monitored in order to guarantee safe and reliable production processes. This kind of process analytics facilitates better monitoring and control of the respective processes. Another positive effect is to minimise resource consumption by optimising water utilisation. It also saves wear and tear on components, prevents disruption to operations and reduces the amount of wastewater that has to be disposed of.

Our services

- Methodology developed especially for your process
- Real-time analysis of relevant water parameters (pH value, surfactants, ions, surface tension etc.)
- Comprehensive process analytics: conductivity measurement, photometry, HPLC, titration, IC, voltammetry
- Seamless documentation of your quality assurance measures
- Online customer portal for fast inspection of measurements
- Optimised process management and quality assurance in component cleaning, laundry, cooling etc.
- Illustration of optimisation potential with water, energy and chemicals
- Identification of potential to save costs in wastewater treatment and disposal
- Determination of production-related water losses and, if applicable, consequent recovery of wastewater charges

Water Footprint

An average West European consumes for example 120 litres of water a day for drinking, cooking and personal grooming and hygiene. However, this "direct water use" only accounts for a tiny portion of demand as a whole. People also need water indirectly, to produce food and clothing for instance. This equates to a daily average of over 4,000 litres of water for every West European.

Optimisation of water management

We can use the water footprint to determine the direct and indirect water consumption of, for example, a product or a business. It is thus possible to shine a light on your water consumption and identify solutions designed to reduce water usage.

Our services

- Analysis of amounts of water directly and indirectly consumed by your products and/or your company
- Identification of processes with the potential to reduce your water requirements
- Optimisation of water management and more efficient use of your resources
- Reduction of costs – in-house and along the supply chain
- Transparency along the value-creation chain
- Company's public image – your contribution to environmental conservation

Pharmaceutical water

In terms of volume, water is the pharmaceutical industry's most important commodity. The raw materials needed for pharmaceutical purposes are made from drinking water. Even though drinking water undergoes more stringent testing than mineral water to some extent, companies are repeatedly faced with challenges when treating drinking water from a variety of local sources. Particles, ions, reactive and non-reactive dissolved gases, micro-organisms, endotoxins, organic substances and colloids play an important role.

Complex treatment plants adapted to local requirements are required in order to produce pure and ultra-pure water in compliance with the guidelines of Drug Books. The quality of the water produced is significantly influenced not only by the origin of the drinking water, but also by the design of the water treatment plant. Any shortcomings can repeatedly lead to irregularities here, making stringent monitoring of water quality absolutely vital.

WESSLING Pharmaceuticals will help you to ensure that the quality of your pharmaceutical water is suitable. Our GMP-certified laboratory is licensed under Section 14 (4) of the German Medicines Law (AMG), is fully accredited in accordance with EN ISO/IEC 17025 and is a state-approved drinking water laboratory.

WESSLING checks

- Purified water (AP)
- Ultra-purified water (AVP)
- Water for injections (AAI)
- Water for the dilution of concentrated haemodialysis solutions in compliance with European and United States Pharmacopoeia guidelines and monographs.

Low-ion waters

Operators of steam turbines have a substantial interest in limiting the corrosion of raw materials, avoiding downtimes as far as possible and optimising efficiency, thus lowering costs. This is done through the precise and systematic chemical monitoring of trace elements in the water used. Cost-conscious plant operators monitor the inbuilt online measuring systems themselves on a daily basis due to the risk of explosion. Measurements that cannot be recorded online but are still crucial in power stations are needed in real time to facilitate immediate response and damage limitation.

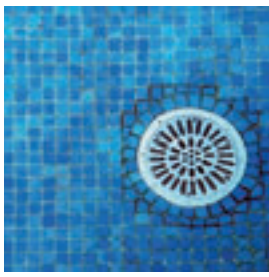
Our trained sampling specialists and our chemical analysis services for power plants are able to monitor all parameters in real time on a daily basis and inform the customer immediately if any limit values are exceeded. We will also help to identify the cause of corrosion in the plants.

Wastewater engineering consultancy

Businesses that use water also produce wastewater, whether they use it during production processes, as a cleaning agent or as a solvent. This wastewater must usually be disposed of or treated at great expense.

There is often a failure to recognise the varied potential of optimised water utilisation and efficient wastewater treatment. Not only will we show you the impact of cost-cutting measures, our authorities management will also prevent any potential differences with supervisory agencies. Optimised water utilisation thus leads to a reduction in running costs, more stable process management and legal certainty when dealing with water as a resource and disposing of wastewater.

Water utilisation has to be considered on an individual basis for every business – and often for every procedural step – in the light of prevailing conditions, in order to achieve the best possible outcome for our customers. We will use our service portfolio to put together an appropriately detailed concept in each individual case. This ranges from defining the scope of examination and selecting suitable analytics to considered reflection on engineering systems.



Our services

- Analysis of operational situation, logging of relevant energy, water and wastewater flows, accounting (specific consumption, loads, costs, etc.), presentation of collected data and compilation of wastewater registers
- Development of concepts and solutions designed to prevent, reduce and exploit residual material flows and wastewater
- Variable comparison (technical and commercial) to configure and optimise systems
- Negotiations with authorities, wastewater associations etc. on matters pertaining to permits, requirements, discharge conditions, payments and charges
- Calculation of production-related water losses and reports to authorities and associations with a view to lowering wastewater costs
- Advice and support during operations, production of measurement systems and support by laboratory analytics
- Expert reports in the event of business disruptions and disputes (corrosion, material damage, bacterial contamination etc.)
- Comprehensive analytical services, including sampling, chemical, chemical/physical and biological testing, and method development and validation

TREATING WASTEWATER – REDUCING COSTES

Energy efficiency in wastewater systems / Drinking water supplies

The treatment of wastewater and the provision of fresh drinking water supplies are complex and, at times, energy-intensive processes. When it comes to drinking water supplies, substantial amounts of energy are required to convey the water through the waterworks and to ensure an adequate supply pressure. The pumps or booster systems used for this purpose may lose a substantial amount of efficiency due to ageing and inadequate maintenance. Modern pumping systems demonstrate higher levels of efficiency, which can pay off in the long run.

Experience shows that sewage treatment plants use substantial volumes of energy, regardless of whether the facilities belong to local authorities or businesses. Aeration systems for activated sludge processes (compressed air) and equipment for conveying and circulating water and sludge are heavy consumers of energy. Municipal sewage treatment plants in Germany as a whole need around 4,400 GWh of energy a year. According to the Federal Environment Agency, however, there is the potential to cut costs by at least 20 per cent by using optimised aeration systems, more effectively controlled power units and energy-efficient pumps and motors.
On top of this, sewage treatment plants can help to produce energy. The recovery of biogas during the anaerobic digestion of sewage sludge is of particular significance here. After undergoing a special purification process, biogas can be used to generate heat and electricity in a CHP plant or fed into the regional grid. Here too, however, there is an ongoing need for optimisation due to advances in technology. The gas yield can also be significantly increased by the co-fermentation of organic waste, for instance.

Our services

- Energy-efficiency analysis of individual system components (pumps, motors) or complete wastewater and water supply systems
- Comprehensive consultancy service: consideration of chemical, biological and physical factors
- Know-how on yield increase and utilisation of sewage gas/biogas
- Comprehensive range of services: WESSLING will accompany the whole process of optimisation (planning, supervision of implementation of measures, assessment)
- State-of-the-art methane visualisation technology: detection of gas leaks along the biogas production and utilisation chain (depending on process technology)

Wastewater analytics

Since the onset of industrialisation, water has been used as a working medium and source material for countless products and its natural composition is altered in the process. Any pollution in the water means a deterioration in its quality. This is why it has long been common practice in Germany to clean up contaminated water to the point where it is not expected to have a negative impact on the environment. As a rule, this means abandoning end-of-pipe systems because contaminated water can often be cleaned directly at source with far less financial and technical input, or targeted measures can be taken to prevent it.

Among other things, WESSLING helps direct and indirect dischargers to monitor parameters in compliance with the German Waste Water Ordinance (AbwV) and municipal sewage works to comply with the self-monitoring ordinance for fresh water (SüwV-kom) by taking samples and providing laboratory services (including verified random samples and 24-hr composite samples with automatic sampling device).

We have been active and effective in the field of sewer film analysis for a long time. Sewer film is a biofilm composed of organic and inorganic elements (e.g. heavy metals), which develops in drainage systems over time.

We use innovative methods to identify dischargers with the help of multiple element analysis and by using an even spread of typical elements. The distribution of metals serves as a virtual "fingerprint" for different discharger types. By using sample recognition methods it is possible to detect these typical pollution samples, even at some distance from the discharger - and sometimes as far as the area around sewage treatment plant. In some circumstances, a few samples give clues as to the nature of the business of the relevant discharger. Identification near to the sewage works offers key advantages: the overall costs of sampling, analysis and evaluation fall and the polluter can be identified more quickly. The time and expense required to locate a discharger can be significantly reduced.

Our services

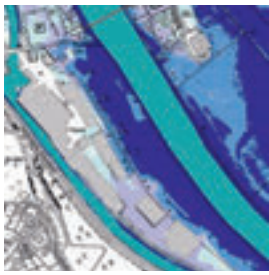
SAMPLING

- Verified random sampling
- 24-hr composite sampling and variable sampling by means of automatic sampler

ANALYTICS

- Complete spectrum of parameters in compliance with AbwV and SüwV-kom
- Sewer film analysis

Excavated lakes / Flooding / EU Water Framework Directive



Rivers, streams and lakes are an integral part of the environment. 2.4 per cent of Germany is covered by water.

Bodies of water and their surroundings have been affected by intensive exploitation to such an extent that virtually none of them are still in their original state. The threat of flooding has increased as more areas of soil are sealed with impervious surfaces and land use intensifies. Polluted watercourses represent a further challenge. Discharges of industrial and residential effluent affect the quality of surface water, as do deposits from areas used for agricultural purposes.

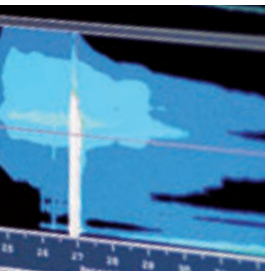
Digging for sand and gravel is vital to the economic success of the construction industry in many regions of Germany. It is common practice for deposits to be extracted below groundwater level, which leads to the emergence of excavated lakes. The quality of newly formed bodies of water must be regularly inspected during and after mining operations. This should ensure that it can be used for new purposes (e.g. swimming, diving, drinking water production) at no risk to health.

The European Union has laid down binding environmental quality standards for priority substances by approving the subsidiary Water Framework Directive 2008/105/EG on 16.12.2008. Further substances were added to the list at the start of 2012, although these are currently classed only as proposals. The substances include industrial chemicals, heavy metals, biocides, drugs and hormones. WESSLING uses the latest measurement systems to analyse these substances and substance groups for trace elements.

Our services

- In-situ flood control, GIS-assisted detailed observations based on existing flood action plans and digital site models/surveys
- Water testing for authorities, industry and commerce in accordance with EU Water Framework Directive (WRRL)
- Use of latest measurement systems to analyse priority substances and substance groups for trace elements
- Expert advice on the implementation of legal requirements

From the source to the bottle



WESSLING complete concept for a mineral spring water company

With annual sales of 13 billion litres, mineral water is one of the most popular non-alcoholic drinks. On average, every German drinks 130 litres of mineral water a year. Over 550 different mineral and medicinal waters illustrate the great regional diversity. In the German food industry, mineral water is alone in requiring official approval.

WESSLING offers a comprehensive portfolio of services for mineral water companies, from analysis of the extracted water and advice on water management right through to inspection of the finished products.

Hydrogeology

The hydrogeological study is the basis for forward planning designed to secure and increase production capacity. We have therefore drawn up such a study for our long-standing customers, the aims of which are to safeguard the site itself and to examine the potential for extracting more mineral water. Similarly, the subsequent detailed monitoring of groundwater means that water resources at the site are secure for the long term. Samples are taken at all the groundwater measuring points in the catchment area of the springs. As well as routine parameters, laboratory analysis also includes substances that lie outside the legal requirements. With regular monitoring, therefore, groundwater contaminants can be detected before they reach the spring.

We import continuous analytical and operating data from the mineral spring user directly into the database created for the customer, which is linked to the geographic information system. Our customers thus have easy access at all times to any parameters of relevance to water management.

Our client has been trying to extend water rights to safeguard the long-term viability of the production site. Preliminary surveys, including groundwater sounding for a new spring, were carried out for this purpose.
A 3D groundwater flow model can be used to plan extraction rates and to predict the ensuing requirements in the catchment areas.

ANALYTICS AND CERTIFICATION

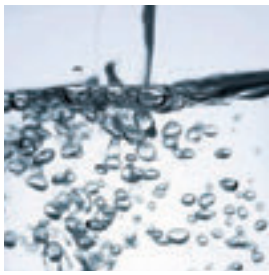
CONTINUOUS CHECKING

LOCATION SAFEGUARDING

Raw and drinking water analytics

We have been carrying out continuous analytical tests on groundwater (raw water) and clean water (shortly before filling) for a number of years. Regular checks on ingredients such as sodium, potassium and chloride guarantee that the extracted water is of consistent quality and provide information for the official declaration on the bottles.

Product analytics



Our range of services also includes the chemical/physical and microbiological testing of mineral water in line with the stipulations of the German Mineral and Table Water Ordinance, with due regard for the specific requirements of products that are marketed with the label "Geeignet für die Zubereitung von Säuglingsnahrung" (Suitable for the preparation of baby food). Check analyses continue to be carried out on the purity at source and mineralisation of the water. We also check that labelling complies with the requirements of food legislation.

Wastewater

Based on its schedule of contributions and fees, the local authority charges 1.8 times more for the discharge of wastewater from drinks producers and bottlers with bottle-cleaning facilities than it does for the discharge of domestic wastewater. A measuring concept has been formulated and implemented in line with the schedule of fees for site drainage in order to reduce these charges for the drinks producer concerned.

To do this, wastewater was examined with reference to CSB and total nitrogen parameters and compared to domestic wastewater in order to determine the degree of contamination, thus making it possible to calculate the wastewater charges to be paid. The measurements made it possible to ascertain the actual level of contamination, which was below that of comparable businesses. This in turn made it possible to calculate the wastewater charges more accurately and fairly.

Conclusion

Ensuring that ongoing preventative measures safeguard the quality and availability of clean water is one of the central pillars of groundwater conservation. It is thus an integral component of efforts to improve the security of supplies and to safeguard local water management systems and industrial sites.

Notes

The A-Z of water-related services

- Accredited sampling
- Authorities' management
- Bathing water analytics
- Corrosion
- Data management
- Development of groundwater supplies
- Drinking water analytics
- Ecotoxicology
- Energy efficiency
- EU Water Framework Directive (EU WRRL)
- Excavated lakes
- Flood control
- Geographic information systems
- Groundwater analytics
- Groundwater modelling
- Groundwater remediation
- Hydrogeology
- Legionella management
- Low-ion waters
- Methodology development
- Micropollutants
- Monitoring
- Pharmaceutical water
- Priority substances
- Process water
- Rainwater use and infiltration
- Self-sufficient water suppliers
- Sewer film analytics
- Surface water analysis
- Wastewater analytics
- Wastewater engineering
- Wastewater treatment
- Water footprint
- Water hazard classification (WGK)
- Water rights applications
- Water treatment

Services

- Customer Portal / Web shop
- Data analytics and processing
- Electronic commissioning
- Electronic provision of findings
- In-house seminars
- Integration of customer-specific portals
- Personal customer consultant
- Sampling
- Specimen collection
- Training courses
- WESSLING Box

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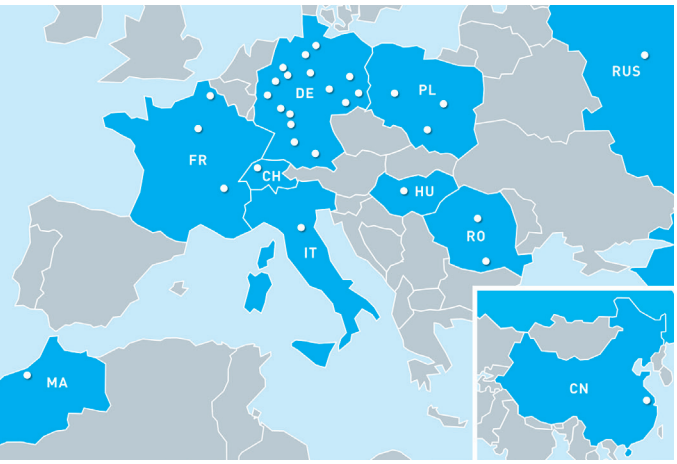

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