

Water Treatment

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bürkert
FLUID CONTROL SYSTEMS



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Water Treatment.

Our focus on water derives from the commitment to our customers to work with the physical attributes of the application environments of your world. In this overview you will find examples which allow you to examine some of our core process competencies.

We believe we have intimate knowledge and significant insight into the application environments that traverse the broad spectrum of water chemistry and water treatment. We can collaborate with you in the real physics of reverse osmosis, ion exchange, boiler chemistry and high purity water where we can share our experience in complete control loops for flow, temperature, pH, level, pressure and conductivity.

We can assist you in determining the most effective water treatment architecture to help you see and assess what is happening in your plant from the control room or the board room. Every member of our company listens to you with the aim of fluently presenting you with only the most appropriate solution in your daily application language. The inherent expertise we offer at Bürkert exists to make your life simpler. Bürkert offers you unlimited modularity in your water world.



Welcome to the Fascinating World of Fluid Control Systems.

Measurement and control: When it comes to working with fluids and gases, we are at your side—as a manufacturer of sophisticated products, as a problem-solver with an eye for the big picture, and as a partner offering you reliable advice. Since we started in 1946, we have developed into one of the world's leading suppliers of Fluid Control Systems. At the same time we have kept our status as a family-run business with a foundation of strong basic values to highlight the way we think and act.

What we build on: Experience

We bring together over 60 years of applied knowledge, theoretical expertise and all-round experience in the field of Fluid Control Systems. We at Bürkert have always taken care to ensure that the insights gained in working on innumerable products and projects are passed on, not only among our over 2,000 employees in various locations and divisions, but also from one Bürkert generation to the next. We focus all our curiosity, passion and commitment on one goal: to provide solutions that take your company that essential step forward.

What sets us apart: Closeness

To engineer expert solutions with added value, you need to be close to your customers and their problems—as we are. For us at Bürkert, closeness means personal closeness. We listen to your every word and do everything in our power to devise and implement the best solution for your needs. Closeness also applies in a technical sense. We know exactly what role our products play in your complex processes. Last but not least, we understand closeness in a geographical sense: Our global presence with over 35 branches and seven production sites allows our customers to draw on technological innovations from all over the world.

What drives us forward: Courage

We aim to surpass your expectations. To make it happen, one quality is vital: courage. The courage not just to look forward but to move forward, to challenge conventional wisdom, to do things differently, to tackle problems others think are impossible and to never give up when the going gets tough. We demonstrate this courage time and again. Our wealth of experience is the solid platform on which our courage is based. It allows us to turn courage into creativity, convert off-beat ideas into surprising innovations and put together individual components to create completely new systems that open up unexpected possibilities.



Good from Every Angle: Our Products.

Fluids are fascinating media. And it is this very fascination with liquids and gases that drives us to develop ever new devices that can handle them even better. We are one of the few suppliers on the market to cover the complete control loop. Our current product range extends from solenoid valves through process and analytical valves to pneumatic actuators and sensors.

To meet our customers' ever-increasing demands, the people at our four research and development centers constantly work on improving both our individual products and our range as a whole. Products that solve a particular problem perfectly, that offer a true value-added benefit over other products, and that meet specific industry requirements.

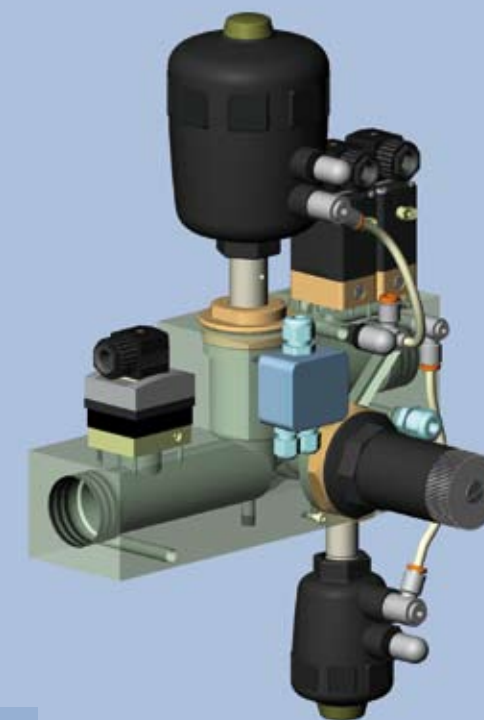
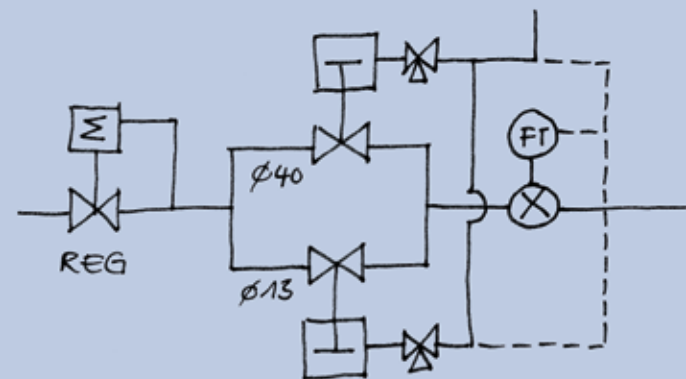
In all aspects of water treatment, we have worked continuously to guide the latest specifications, requirements, and to be involved with special interest groups that push the industry towards higher standards and improved value for their customers. We believe we have done the work that allows you to conduct your business with peace of mind. When you specify Bürkert you know you will receive real, traceable, and consistent quality ... quickly.

Innovative, Value-added Solutions Combine the Best of All Worlds.

You can see Bürkert as a supplier who simply provides you with good products. We are happy to fill that role—but what really makes us proud is when you see us as a partner who joins you in getting the job done—however complex. Even if the problem seems irresolvable, challenge us. Put our courage to the test: It's the tough challenges that drive us, moving you and us forward.

Whether with an individual component or a groundbreaking new system for the entire process of measurement and control, we are at your side at all times with a seamless range of services, from consulting and engineering, to installation, testing and after-sales service.

We work with engineering consultants, integrators, contractors, original equipment manufacturers, and end users in a spectrum of industries from water chemistry and purification to industrial wastewater treatment. We offer expertise in optimized system solutions for ultra-pure water, reverse osmosis, ion exchange and boiler chemistry ... in your application language. Speaking a common language eases communication and lays the foundation for your success.



IDEAS & CONSULTING

SIMULATION & DEVELOPMENT

SYSTEM DEVELOPMENT

PROTOTYPE



Bürkert's World of Water.

The field of water treatment demands superior instrument performance and networkability. Our versatile systems highlight our continuous customer-oriented innovation and are developed to simplify any water treatment situation, which in turn will save you time.

An otherwise unattainable synergy of hardworking valve elements, process actuation, sensors and networked communication provides a true single source of remarkably attractive systems. Peace of mind, process safety and ease of use in a world where application knowledge, reliability and quality are paramount.

Components are designed according to global norms and standards for your critical water applications. Proven reliability, superior accuracy and virtually maintenance-free service ensure Bürkert's systems deliver unsurpassed total performance in the form of complete control loop systems.

From pneumatic actuators to sensors and process valves, our products and system solutions cover the entire process involved in working with fluid media.



Wide range of solenoid valves



MultiCELL analytical controller



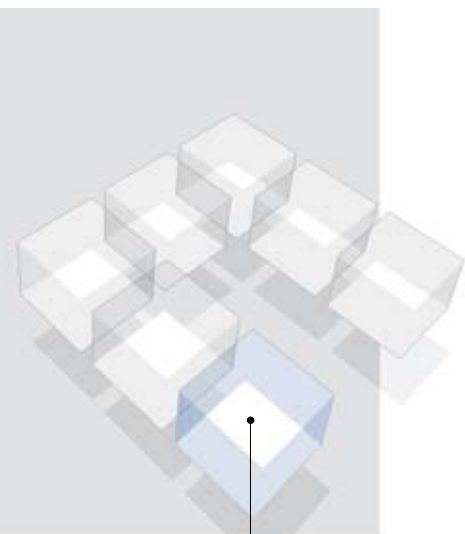
8644 AirLINE process control center



EXPERIENCE

There are things which are not inherently yours. You have to gather them bit by bit, you receive them from others, and you constantly have to acquire them anew. That is what makes them so valuable. Experience is one of those things. For instance, because of our many years of experience with water chemistry and water systems, we can provide our extensive services to you—from consulting, development, and installation to testing and after-sales service. Be it with individual product solutions or a pioneering new system for the entire measurement and control process: Benefit from our experience!

Industrial Design.



*Diverse applications
in many industries.*

In gas scrubbing, HVAC, textile, printing, metal plating and printed circuit board production, simplicity and toughness make our sensors and valves the perfect choice.

For level, TDS, flow or temperature transmitters, Bürkert is the proven partner of choice across a wide range of industries where water chemistry is essential to the quality of the final product.

If you neutralize, concentrate, filter, recirculate, mix or batch, the people at Bürkert are ready to help you design the optimum solution.

Typical PCB production.



2030 flanged diaphragm valve



8032 PVDF flow meter



Non-contact level transmitter



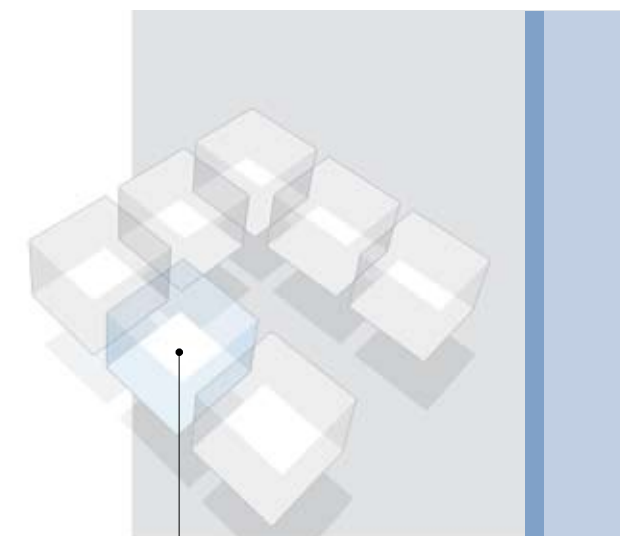
Water—Your Most Valuable Ingredient.

In pharmaceutical, biotech and semicon sectors, water is known as the most important ingredient. Water purity and consistency are essential to the success of the final product, and the consistent success of every product is essential to the success of the company.

There can be no mistakes. Whether it affects the sterility of an injectable saline solution or the production of clean steam, traceability and certification of water quality is standard procedure. We take the risk out of water production, distribution and use.

Bürkert is involved in the complete water supply chain from ground-water treatment and incoming water supply, processing your most stringent requirements, inline verification to final effluent decontamination and neutralization.

We understand the necessity for strict industry manufacturing guidelines such as 3A, EHEDG, FDA, USP and NSF so that Bürkert's technology and expertise are implemented with confidence in the production of purified water or water for injection.



*We ensure
high purity.*

Water for injection production and distribution.



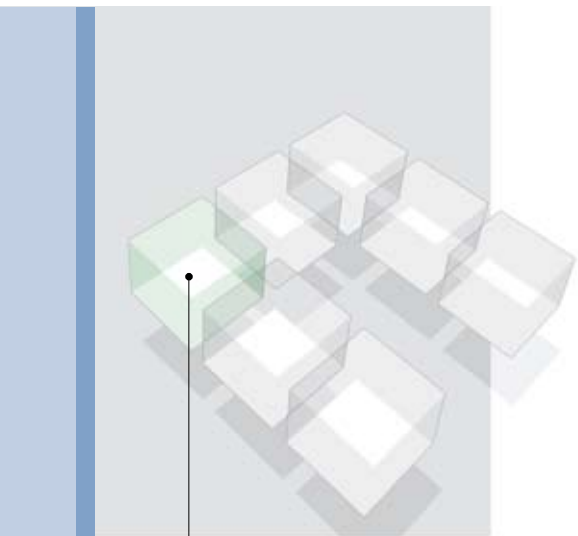
8138 sanitary radar level



2032 pneumatically
operated t-valve



8030 SS paddle with
sanitary tri-clamp



Cooling towers
continuously at work.

Watch Tower.

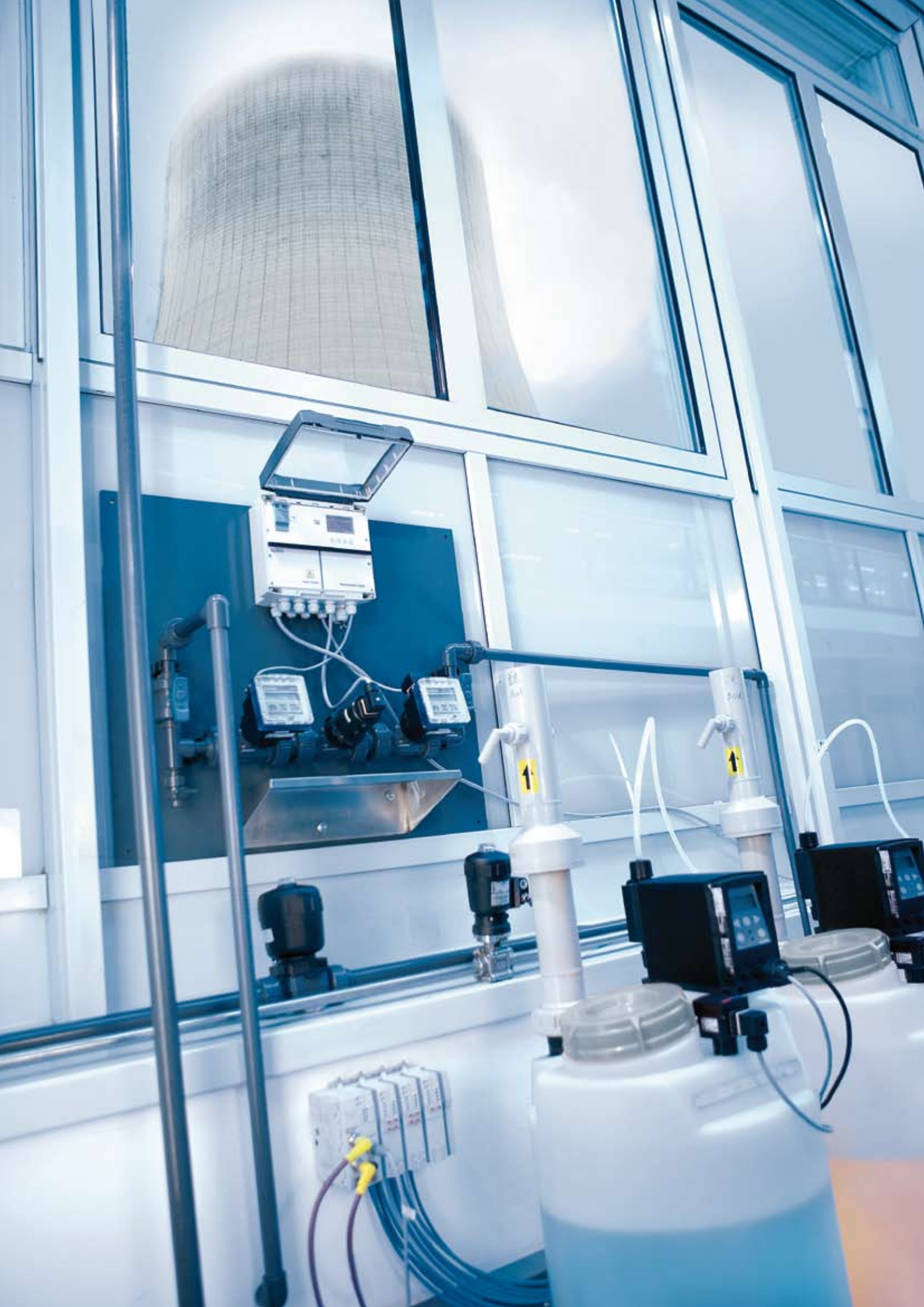
Organizations rely on the safe and effective operation of cooling towers. To achieve this, someone has to be on guard.

We have embedded our long experience into intelligent solutions which allow chemicals to be dosed reliably. Our technology helps to prevent Legionnaire's and many other unwanted biological activities thereby creating a safe working environment.

Our process sentinels control bleed and feed, biocide injection, and provide reliable alarms in critical situations increasing overall efficiency.

Let our systems watch your towers.

Cooling tower. Efficient control system.



Cooling tower chemical
control panel



Ball valves and butterfly valves

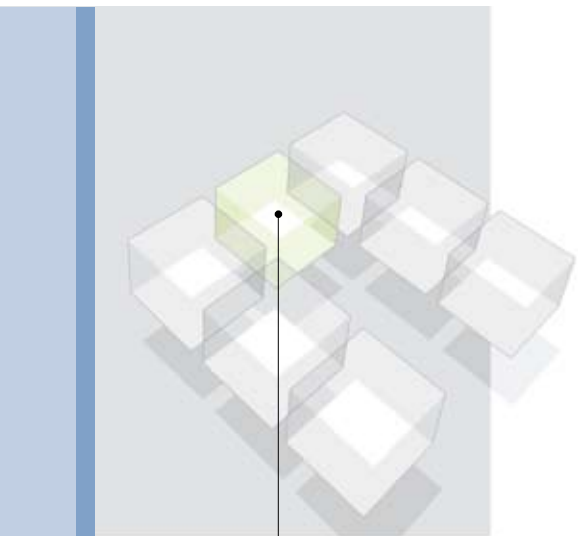


8223 inductive conductivity
transmitter



COURAGE

Those who only work toward optimizing things that already exist will eventually reach the limits—technically, financially, or personally. In order to overcome these limits, courage is needed: The courage to be different and trust one's own ideas; the courage to venture into the unknown, searching for new ways to develop products that have never existed before. We have this courage. By pooling and utilizing our competencies across all sectors, you benefit from our cumulative knowledge of water treatment strategies—whether it is in industrial waste neutralization, drinking water production or metal plating.



*More parts of the world
will suffer from lack of
drinking water in the future.*

Quench Your Thirst for Innovation.

As more stringent regulations come into effect around the globe, Bürkert is allocating resources to develop more efficient water treatment components and systems.

Cryptosporidium, heavy metals and arsenic are part of our water world and our partnership approach makes sure that we can offer the right high-quality solutions for drinking water from a wide range of water sources.

We define ourselves in this field through operative efficiency, flexibility and simplicity.

Refreshing solutions.



*Range of standard and custom valves
for accurate and reliable filling*



2103 SS sanitary diaphragm valve



*8056 high-frequency MagFlow
batch controller*



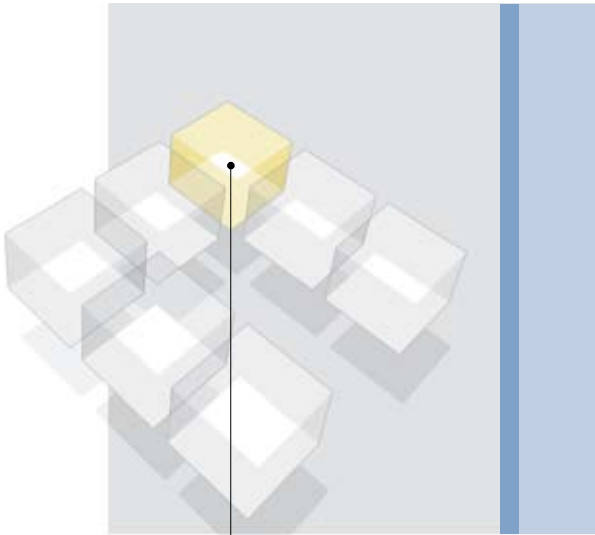
Fast-Forward to Reverse Osmosis.

In the competitive field of reverse osmosis, purity is expected. Customers are concerned about lifecycle costs and strategies for monitoring percentage reject and ratio efficiency.

In solutions from dialysis water and laboratory water to power generation boiler supply we are known for supplying the highest quality isolated solenoid valves, precise and reliable flow meters and accurate conductivity and pH instrumentation.

We supply our reverse osmosis clients with more than just components. We cooperate to produce cost effective control subsystems.

Our three regional Systemhaus teams can provide rapid prototypes and our global clients trust us to supply the right stuff, fast.



RO comes in many sizes and is employed in many industries.

Experience and knowledge transferred over many years means our systems are deployed globally.



On/off and continuous control valves

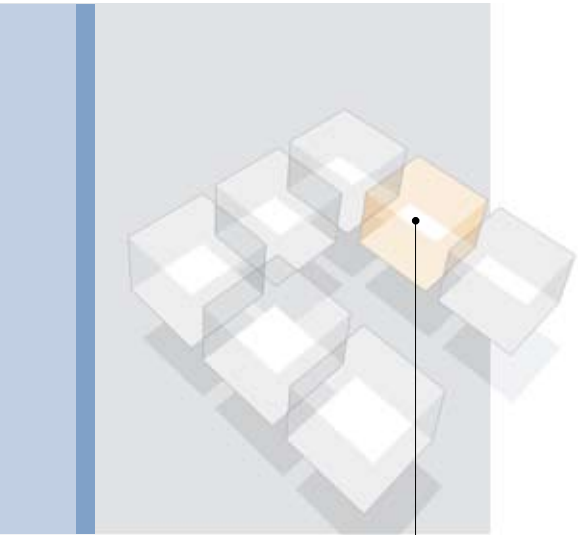


8400 temperature transmitter



Wide range of process solenoid valves





*Ion exchange is a
key step to high purity.*

Exchange Hard for Soft.

Today's economic climate means industries demand continuous improvement of water quality.

Manufacturers of ion exchange equipment choose Bürkert as their single source for process actuation, networked communication, control and the synergy of hardworking valve and sensor elements.

Users of ion exchange equipment know they can rely on us for global support and process expertise.

Ion exchange equipment for pure or ultra pure water can operate with customer confidence.

Ion exchange for boiler feed requirements.



8041 insertion magnetic
flow meter



Multi-channel controller for
water treatment systems



2030 chemical and
water valves



Hot Ideas for Water Chemistry.

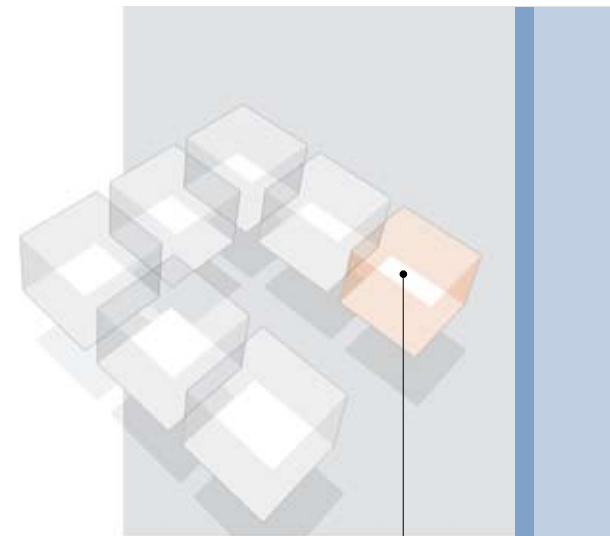
Bürkert has a long history in steam systems, and at the heart of all of these systems is the boiler.

We provide solutions that reduce downtime, increase efficiency and keep people safe.

Our boiler water equipment controls the injection of chemical inhibitors and oxygen scavengers. We control scale and corrosion and make sure your system operates 24 hours per day, 7 days per week.

We monitor and control conductivity, pH, dosing pumps, feedwater flow and blowdown.

As well as a cool portfolio of components for steam distribution, we have lots of hot ideas for boiler water.



The boiler—heart of the steam system.

Boiler water chemistry control system.



2012 flanged steam valve



8110 high temperature
tuning fork level switch



7800 metering pump





CLOSENESS

There are things we simply take for granted. Only when they are gone, do we realize how important these things really were. This applies in particular to closeness. Without closeness, it is very difficult to build relationships and a good understanding of one another. As an established medium-sized company, we know that. That is why we are always there for you. Working with you, we develop the best possible solutions for your projects in the area of water and water treatment. Our global presence in 35 locations enables us to press ahead with technical innovations for our customers around the world.

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