

**BEULCO®**



**The safe supply with  
clean drinking water.**

## ABOUT

BEULCO GmbH & Co. KG is a modern managed family-owned industrial company and is one of Europe's leading top suppliers of high quality products in the fitting industry.

With our products, services, ideas and solutions, we ensure that the most important food is protected and reaches people in the best possible condition.

We offer solutions in the areas of domestic connection technology and mobile water supply as well as systems for the efficient design of the drinking water network, which allow transparency and control.

We use resource-saving, lead-free and hygienic materials for our products. This is another reason why disinfection is very important to us. With our solutions for the disinfection of plants, installations and the drinking water itself you are on the safe side - easy, fast and environmentally friendly.

## PRODUCTS FOR EVERY APPLICATION

BEULCO offers you products for many areas of application. Besides our products for the water supply, the drinking water hygiene and sampling, for the house connection as well as for the mobile water supply for events or during construction activities, our range comprises products for the gas and solar sector, for heating, district and local heating and industry applications.

## QUALITY, RELIABILITY AND HONESTY

Since our foundation, our aim is to provide practice-oriented products that are sustainable and effort-saving in order to advance the efficiency and to improve the quality by selected materials.

With the brand BEULCO we are oriented towards market and customers as a development partner in industrial and commercial activities concerning processing of brass alloys and producing components, modules and systems. For us, sustainability plays an important role in the field of personnel development or the use of environmentally friendly resources.

**1956**

The young company patents the BEULCO screw connection – the first screw fitting for plastic piping which no longer requires heating of the pipe for installation.



**1977**

Karl Beul's sons Karl-Heinz and Rudolf Beul take charge of the company. A 2000 m<sup>2</sup> administrative building is constructed in the same year. BEULCO products are showcased at international trade fairs.

**2002**

Axel Beul and Karl-Heinz Beul jun. take over the company. BEULCO receives the certificate DIN EN 9001:2000.

**2014**

BEULCO devises a comprehensive new company strategy that advanced the development of the company over the following years, under the name 'BEULCO in Motion'.



**1950**

Karl Beul begins producing special brass fittings in a small workshop in Attendorn. In doing so, he laid the foundation for a highly successful future for the company.



**1972/73**

The success story of Beulco Armatur AB starts in Sweden as well as the collaboration with the Gerritsen family, giving rise to BEULCO Holland.

**1991**

The production area gets expanded to create space for screw machining and a modern high-bay storage facility.

**2009**

Axel Beul, Karl Beul's grandson, takes over the company as the sole shareholder and appointed an external management board and expert advisory board.



**2017**

Development of the long-run corporate strategy „BEULCO 2025“.



# Product range

Our range is divided into products for the house connection and products for mobile drinking water supply.

## House connection

### Plug and clamp connectors made of brass and plastic

Our diverse program of compression and plug-in fittings offers a broad assortment of various types, so that you can find the right product for your area of application.

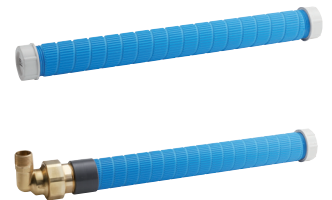
The materials are selected based on the area of application in order to ensure highest safety. For us it is very important that our products meet the strict legal requirements nationally and internationally. Especially our fittings for the application in drinking water systems are characterized by the use of ECOBRASS, a high-quality lead-free material.

The latest innovation is our program of plastic connectors. Function and material are aligned in a way that highest possible safety and best comfort are given during installation.



### House leads and equipment

Safe protection for cables and lines. BEULCO house leads or wall ducts ensure reliable sealings between supply or disposal conduits and the protection pipes of the wall ducts. The wall ducts are leakproofed against water, pressing ground water and straying gas.



### Gate valves

BEULCO gate valves enable the safe locking of parts of piping networks or pipeline systems. The valves are designed in a way that the overwinding or breakage of spindles is not possible.



### Fittings

Great Diversity for the application in drinking water, water and heating systems. BEULCO threaded fittings are ideal for the application in the field of water and heating installations. The wide variety enables combinations for each situation (sanitary, heating, industry, climate).



## Tapping saddles

A tapping valve is used to connect domestic service lines and is the transition from the main supply pipe to the building. It realizes a branch, without taking the supply line out of service and thus avoids the impairment of entire districts or supply areas.

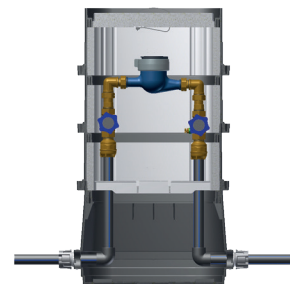
The product range is characterized by special properties that differ significantly from other types of fittings on the market.



## Water meter boxes

A water meter box is thus an optimal and common alternative for the installation of a water meter facility.

Using a box, the water transfer point is shifted from the inside of the building to the property boundary – in this way the water supplier can access the water meter at any time. The BEULCO water meter box with protection from frost is planned for the installation of water meter systems outside buildings. The box is not only suitable for the house connection, but also for the connection of cemeteries, parks, garden plots, camp sites, green areas or of similar fields.



## Water meter installation and equipment

BEULCO Water meter installation sets are the optimal solution for the installation in new buildings, when renovating old systems or when retrofitting existing systems.

In order to enable a competent and simple installation the brackets are equipped with cross slots to guarantee an ideal adjustment of the installation set during assembly. Additionally, length adjusting fittings belong to the set which help to find the optimum position of the water meter. To make sealing of the water meter installation set even more safe, the fittings are equipped with roughened threads.

The wide range of BEULCO water meter sets offer suitable products for different situations and conditions. Standardly, the water meter installation sets are equipped with a mounting set.

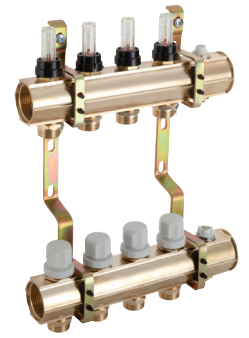


## Heating circuits

BEULCO heating and cooling manifolds made of high-quality brass ensure an efficient and equal heat distribution and thus for constant temperatures. In connection with integrated regulation valves the manifolds guarantee the exact setting of flow quantity.

All BEULCO manifolds are ready to connect, leak tested and equipped with sound-insulated fastening elements.

BEULCO manifolds are available in different versions and guarantee practice-conform combination possibilities so that for each application the ideal product can be found.



## Products for water sampling and water hygiene

The European Drinking Water Directive 98/83/EC describes water as our most important good and thus highlights the importance of its protection. Drinking water is of high value as it has a direct impact on human health.

For drinking water installations, that means that planning, construction and operation of a drinking water system should not cause illnesses due to mistakes or errors.

A regular test for drinking water is prescribed in the Directive 98/83/EC. All member states need to adopt these regulations and should have adjusted them to the state's specific needs and conditions.

BEULCO offers a broad range of products for water sampling.



## Mobile water supply

According to the Drinking Water Ordinance, drinking water must be supplied such that, 'consumption or use does not cause harm to human health.' Consequently, drinking water installations and plants must be planned, built and operated in such a manner that no risks are incurred for the consumer. This applies to the entire water supply system, from the production of the water through to the actual outlet point of the drinking water, regardless of whether the installation itself is stationary or mobile.

Mobile and temporary water outlets in particular may harbour serious risks often hazardous to health, even if the installation appears to be properly maintained. This is because mobile systems as well as the entire public drinking water network may become contaminated through the unfortunate combination of various factors. In particular, these factors include reverse siphonage, reverse pressure and backflow of non-potable water into the drinking water installation.

Due to the increased risk associated with mobile, temporary water outlets, compliance with measures for ensuring drinking water quality forms the highest priority.



## Intelligent solutions for the new generation of water supply

BEULCO stands for an efficient, safe and transparent drinking water supply, especially in the field of domestic connection technology and mobile water distribution.

Our intelligent solutions play a major role in water supply 4.0. The focus is on areas such as transparency, security, control and, above all, efficiency. These systems make the drinking water network and drinking water supply more transparent, opening up a wealth of new possibilities for efficient and effective network control.

### **BEULCO TrackIT**

The TrackIT platform offers a quick and simple overview of the current standpipe locations.

By means of virtual borders the water supply area can be pre-defined. In case a standpipe crosses the border and leaves the supply area, an automatic alarm is sent to the responsible person. This ensures an effective theft protection.

TrackIT makes supply areas more transparent and enables more efficient and effective work processes.

### **iQ water system**

The iQ water system creates transparency and control in the water network, opening up new possibilities for effective and efficient network control.

It expands existing mechanisms with potential for leakage monitoring and minimizing water loss.

### **Standpipe Manager**

The standpipe manager provides a holistic solution for the effective management of standpipes and digitizes the process of standpipe rental from reservation to return.

Extensive features ensure easy, efficient and effective standpipe management and process improvement.

### **BEULCO Clean**

Effective and rapid disinfection of drinking water and drinking water distribution systems with the innovative disinfectant BEULCO Clean.

It is designed to be sustainable and breaks itself down again by 100%. Due to its composition, BEULCO Clean is not a dangerous good.

# BEULCO TrackIT

The problems in standpipe management and leasing range from damage or theft to unauthorized water withdrawal in foreign networks or on disallowed hydrants. This may result in serious consequences like the contamination of drinking water or water networks, which need to be removed with high efforts.

TrackIT opens the possibility of localizing all standpipes and hydrants in a supply area and makes sure, that all relevant information about the standpipe and its usage is stored. Further it is a tool for an easy, digital and efficient standpipe management.

## TRANSPARENCY

The TrackIT platform offers a quick and simple overview of the current standpipe locations. By means of virtual borders the water supply area can be pre-defined. In case a standpipe crosses the border and leaves the supply area, an automatic alarm is sent to the responsible person. This ensures an effective theft protection.

TrackIT makes supply areas more transparent and enables more efficient and effective work processes.

## SAFETY

TrackIT means more safety in water supply networks as well as the minimization of abuse in the area of drinking water supply and standpipe usage. Due to increased transparency and control the location of use and the type of application are visible on the platform. This may help identifying the causes of water or network contaminations.

The platform shows further parameters like the current outdoor temperature and the battery status of the tracker. In case of critical values (eg. frost temperatures), the system automatically sends warnings.



## GPS-Tracker

In order to satisfy the challenging requirements in operation with standpipes, we use a special GPS-Tracker. The resilient body withstands even the hardest conditions. The standpipe can be localized with the accuracy of nearly one meter.

- shockproof, IPX7 compliant
- Low power consumption, long lifetime (depending on usage up to 3 years)
- Battery replaceable (alarm when low battery status)
- Energy-saving mode for resource-saving storage
- Thermal sensor with warning in case of frost
- Tracker is pre-installed or delivered as retrofitting solution (installation service available)



## TrackIT platform

The TrackIT platform enables an efficient and effective management of the standpipe stock. Furthermore, it offers a localization solution to guarantee more safety in drinking water networks.

- Overview about all standpipes on the digital map
- Possibility to manage standpipes with basic information (number, name, type, maintenances)
- Lease contracts via PDF
- Notifications in case of status changes (eg. meter calibration or maintenances are due)
- Theft protection via geofencing (Alarm in case a standpipe leaves the defined border)
- Automatic alarms in case of limit values (temperature, battery, duration of leasing)
- Data logger feature makes activities replicable and creates a history
- Creating customer data
- Compliant with data privacy. No use of personal data.

**BEULCO**

Tracker 862365031159548

23.04.2018 01:55 - 23.04.2018 13:36

Karte Satellit

Attendorf, BIGGEN

NEU-LISTERNOHL

Kartendaten © 2018 GeoBasis-DE/BKG (©2009), Google Nutzungsbedingungen Fehler bei Google Maps melden

**Stammdaten**

ID: 103589  
 Name: Standrohr 15  
 Typ: Sonstiges  
 Adresse: Kölner Str. 92, 57439 Attendorf, Deutschland  
 Batteriestatus: 35 %  
 Temperatur: 23.4 °C  
 Zählereichung: 15.10.2018  
 Systemtrennwartung: 23.01.2019

Speichern

**Kundendaten**

Anschrift: Max Mustermann, Musterstraße 1, 12345 Musterstadt, Deutschland  
 Einsatzzweck: Trinkwasser  
 Beginn: 14.05.2018  
 Ende: 18.06.2018

**Einstellungen**

**Beulco Freigabe**  
 Beulco hat Zugriff auf die empfangenen Daten  
 Zugriff deaktivieren

Das Gerät befindet sich im Normalbetrieb. Im Lagermodus werden keine Standortdaten gesendet. Die Aktivierung des Normalbetriebes kann bis zu 24h dauern, wenn sich das Gerät im Lagermodus befindet.

Lagermodus aktivieren

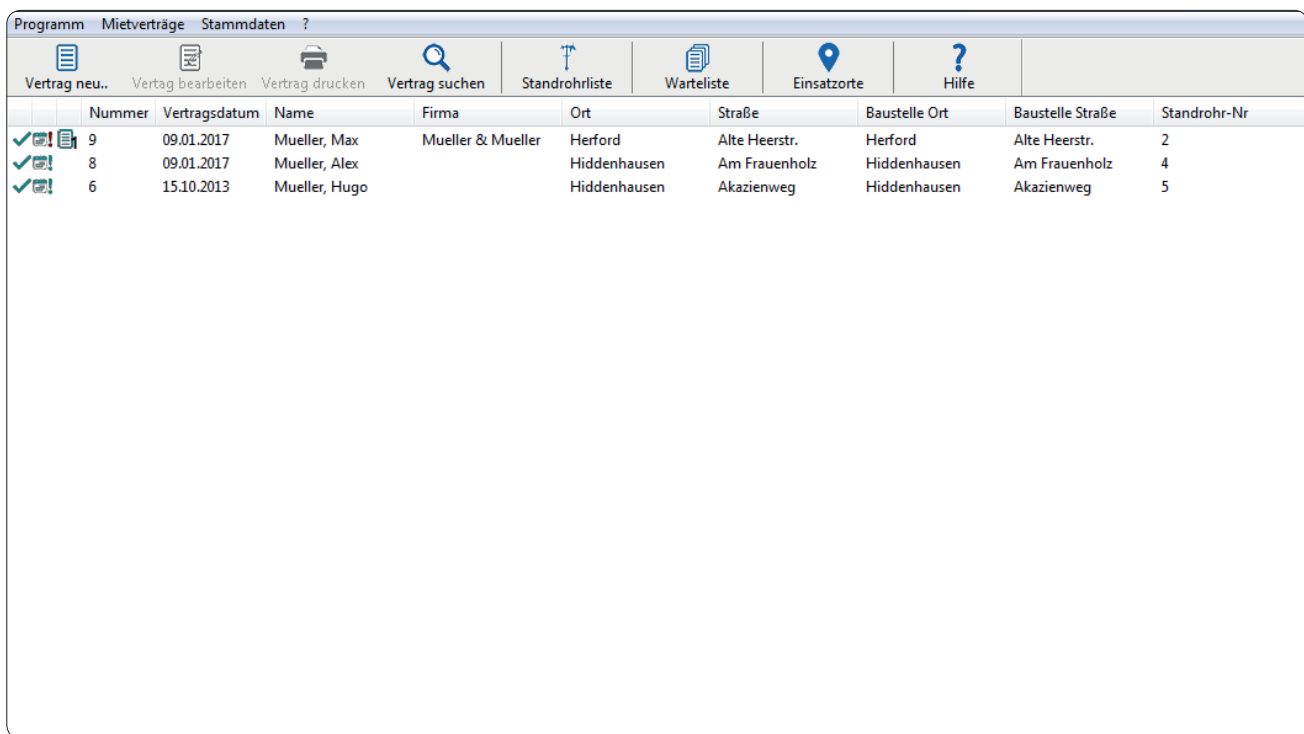
Abmelden

# BEULCO Standpipe Manager

The standpipe manager offers a holistic solution for the effective maintenance of standpipes and digitalizes the process of leasing standpipes from the reservation to the return.

Frequently standpipe maintenance and leasing tend to be time-consuming and costly. Often the contract management ends up complex and confusing - documents and folders pile up. Common issues with standpipe leasing range from damage and theft to unjustified water withdrawal from external supply systems or from not adequate hydrants. These scenarios may lead to profound consequences like contamination of the water supply system which can only be removed by applying significant effort.

Our standpipe manager offers a complete overview of the standpipes, customers and contract data. The process of standpipe leasing will be optimized through automated notifications of necessary inspections, meter calibrations, expiry of the lending period or intermediate readings of the water meter. This leads to an efficient and effective standpipe management.



The screenshot displays the BEULCO Standpipe Manager software interface. At the top, there is a menu bar with 'Programm', 'Mietverträge', and 'Stammdaten'. Below the menu bar is a toolbar with icons and labels for 'Vertrag neu..', 'Vertrag bearbeiten', 'Vertrag drucken', 'Vertrag suchen', 'Standrohrliste', 'Warteliste', 'Einsatzorte', and 'Hilfe'. The main area contains a table with the following data:

	Nummer	Vertragsdatum	Name	Firma	Ort	Straße	Baustelle Ort	Baustelle Straße	Standrohr-Nr
✓	9	09.01.2017	Mueller, Max	Mueller & Mueller	Herford	Alte Heerstr.	Herford	Alte Heerstr.	2
✓	8	09.01.2017	Mueller, Alex		Hiddenhausen	Am Frauenholz	Hiddenhausen	Am Frauenholz	4
✓	6	15.10.2013	Mueller, Hugo		Hiddenhausen	Akazienweg	Hiddenhausen	Akazienweg	5

## BEULCO Clean

The effective, environmentally friendly and risk-free disinfection of drinking water supply systems.

Consumers (in Germany) can be sure that their water suppliers deliver safely and reliably clean water. However, acc. to the Drinking Water Ordinance 2001, the responsibility for the quality from the delivery point (water meter) lies with the provider or the owner of the system. Acc. to § 4 section 2 and 3 of the ordinance it is prohibited to provide the consumers with contaminated drinking water .

But as seen in the past there are providers who do not comply with their responsibility to clean and disinfect the water leading devices and appliances. The results are microbiological contaminations with e.g. legionella bacteria, pseudomonas, coliform bacteria, enterococci, clostridia and other germs that multiply rapidly in the so-called biofilm.

This generates high risks not only for house installations, gyms and hospitals, but also for the drinking water net.

The **DVGW working sheet W291** describes the common substances for the **plant disinfection**. These are among others the following ones:

- hydrogen peroxide
- potassium permanganate
- sodium hypochlorite
- calcium hypochlorite
- chlorine dioxide

The list of **preparation substances published by the Federal Environment Agency** contains substances which can be used for the disinfection of water itself:

- chlorine
- chlorine dioxide
- sodium hypochlorite
- ozone

### CONCLUSION:

**Sodium hypochlorite** is a substance that is allowed to be used for the disinfection of plants as well as for the disinfection of (drinking) water.

BEULCO Clean is a disinfectant on the basis of sodium hypochlorite. It is sustainable and decomposes naturally by 100 percent. Due to its composition BEULCO Clean is no dangerous good.

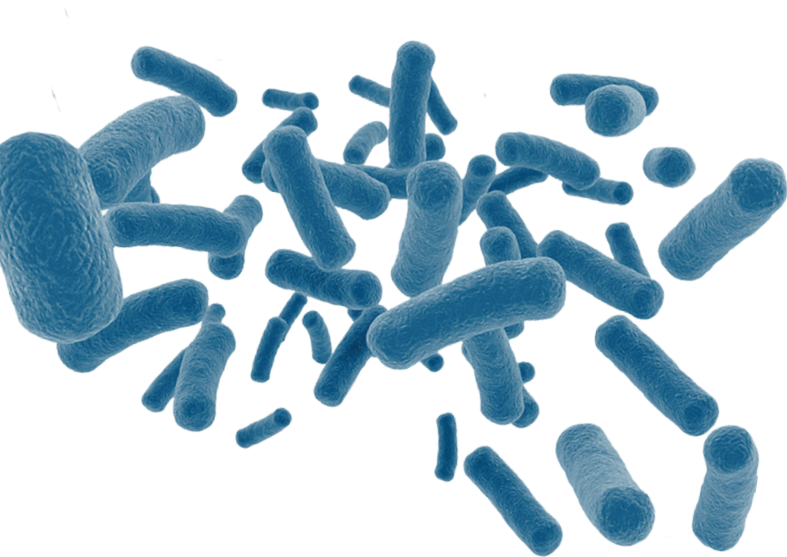
### Substitution Duty

If hazardous substances are used, the employer is obliged to examine if they can be substituted (§ 6 of Ordinance of Hazardous Substances). If the use of a less or even harmless substance is possible, this one has obligatory to be applied.

## How does BEULCO Clean work?

There are only natural elements that are used during its production: water, salt and electricity. The elements are transformed by membrane cell electrolysis (ECA process) to BEULCO Clean. ECA stands for electrochemical activation, a process by which substances are specifically influenced by physical and chemical reactions. The result is the efficient and widely applicable BEULCO Clean.

It differs from the conventional sodium hypochlorite substances as there is no reaction time and it decomposes itself very quickly. BEULCO Clean has a strong Redox potential and destroys organic material in the water (eg. contaminations, germs, bacteria) but is harmless for humans.



### Effektive and powerful against:

- Legionellae bacteria
- e-coli bacteria
- coliforme germs
- pseudomonas
- streptococci
- salmonellae

## Proven Disinfection by means of the REDOX value

The disinfection with BEULCO Clean is carried out together with a rinse as contaminations are directly flushed out in this way.

Using the disinfection plant BEULCO Clean is given into the rinse water by a mixer (relation 3% = 3 ml/liter water). When disinfecting, rinsing continues until the water shows a redox tension of 650 mV – 700 mV. According to the current state of knowledge water and surroundings (conduits, hoses and fittings) are **germ-free** with this value.

The disinfectant effect can be measured by the Redox value of the rinse water.

The Redox value (mV) is a measure for the germicidal and oxidative effect of disinfectants in the water.

The higher the Redox value of the water, the lower is the contamination.

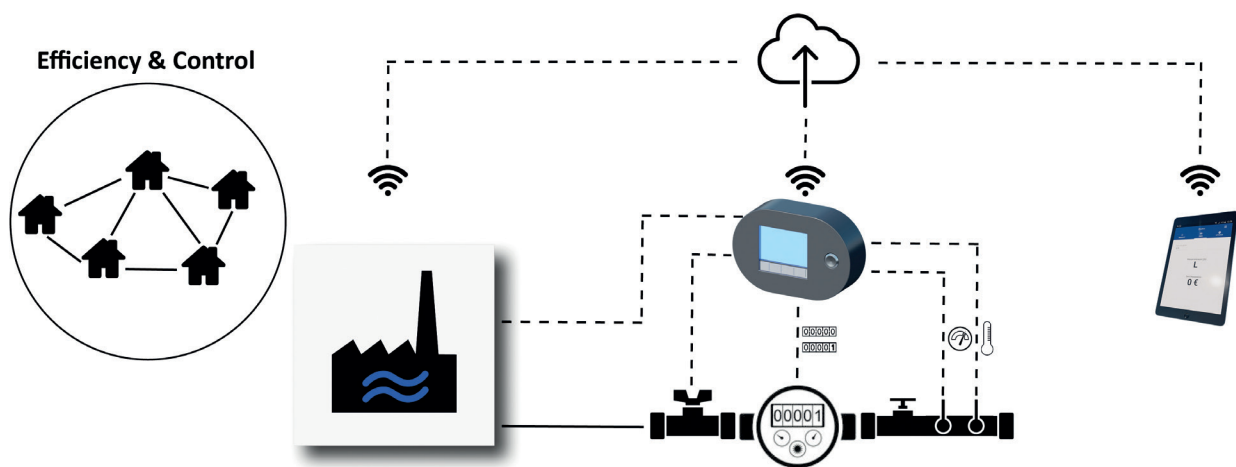
This disinfectant is already effective in a small quantity. By using substances on the basis of sodium hypochlorite germs cannot build up resistances as sodium hypochlorite decomposes germs at molecular level and does not only kill them.

# iQ water system

The new generation of efficient water networks.

The iQ water system creates transparency and control in the water network, enabling a new standard of efficiency and safety.

Globally, 30-35% of the drinking water transported by the water supplier to the end user is lost. Leakage due to leaking or defective components of the water supply network is responsible for this. Frequently, there is a lack of transparency and control in the network in order to optimally manage lines and thus manage loss management efficiently.



## Do you know where, how and when your water is running?

The iQ water system provides transparency and control in the water network, opening up new possibilities for effective and efficient network control.

It expands existing mechanisms with potential for leakage monitoring and minimizing water loss.

## Data protection, data security, data storage, data abuse?

No problem. iQ water system processes all information legally compliant and compliant with data protection with a high level of security.

Data is encrypted directly and can not be viewed until decryption.

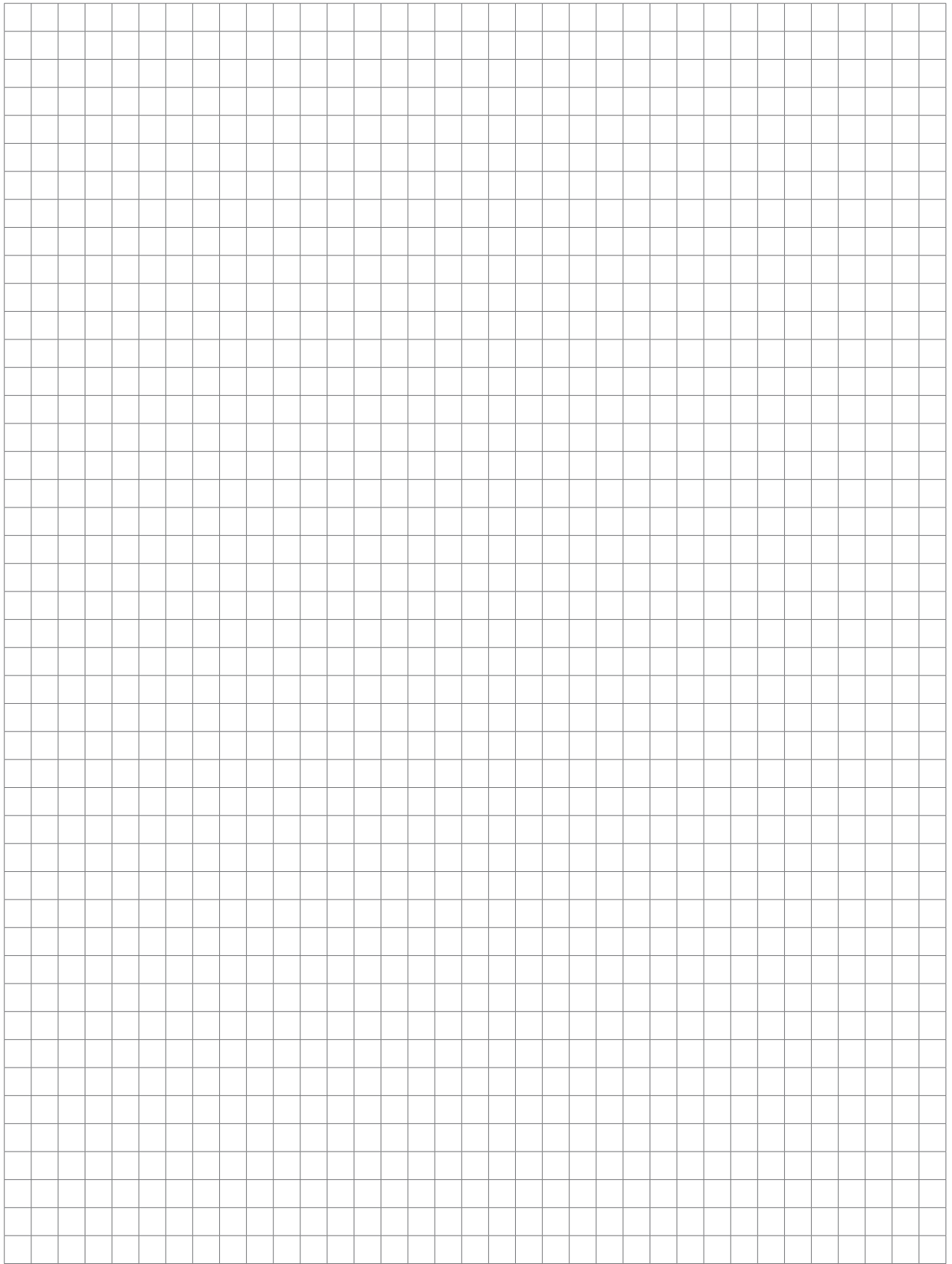
## What do you do at the end of the year - meter reading?

With iQ water control, meter readings are reported directly to the utility's system. iQ water control merges all the data and sends it encrypted to the utility company - of course compliant with data protection.

## What else do you offer your customers - except water?

With iQ water system you can not only sell water - but at the same time a system that offers your customers added value. Leakage monitor, water consumption analysis and holiday function enable transparency and safety.

One System - Benefits for Utilities and Customers.





## OUR CONSULTING TEAM



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