

Product Magazine

Hygiene and comfort redefined A masterpiece

Shower channel for floor-even showers **Sophisticated beauty**

Reliability has no expiry date

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On the cover Perfectly designed innovations: the new shower toilet Geberit AquaClean Mera and the Geberit shower channel CleanLine

Photos Stefan Thurmann (cover, pages 4/5, 9, 19) Ben Huggler (pages 6/7) Michael Suter (pages 10/12) Keystone (pages 14, 20/21)

Available as an app This product magazine is also available free of charge as an iPod app in the App Store.

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Editorial

The shower has evolved into a key bathroom fixture in its own right. In a nutshell, this is because people can't do without their full-body cleansing routine at least once each day. This can be done more quickly in the shower than in the bathtub, and showering also uses a lot less water.

Architects and building owners have recognized this need and are granting the shower even more room and a greater status within the bathroom. As a result, open, spacious and floor-even showers are no longer uncommon in the new buildings of today. When older buildings are being modernized, showers are also increasingly getting the thumbs up – and bathtubs the thumbs down – when it comes to the bathroom renovation.

Anyone who believes that it is easier from a constructional perspective to install a modern shower than it is to install a bathtub is on the wrong track. After all, the more minimalistic the interior design of a bathroom, the tougher it is for the plumbers, tilers and other professionals on the job. This is particularly the case when it comes to floor-even showers.

Here the focus is mainly on two aspects, namely the perfect caulking of the floor and the installation of an elegant, practical and efficient drain. As a recognized specialist for reliable and sophisticated building drainage systems, Geberit has once again risen to these challenges. This has led to solutions that are likely to be groundbreaking for the sanitary industry and which will further cement Geberit's position as an innovation leader.



Michael Reinhard, Member of the Group Executive Board, Head of Group Division Products



↑ Installed anywhere you wish: Geberit remote flush actuator (page 9)



↑ Beautiful and neat: Geberit shower channels CleanLine (page 13)



↑ Good-quality drinking water at all times: Geberit sanitary flush unit (page 23)

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↑ 25 million passengers a year: That's a lot of visits to the toilet.

365 days of continuous operation

Sanitary technology as a calling card



For air passengers, the toilet facilities are often the first and the last point of interest at the airport. This is why Flughafen Zürich AG, which operates Zurich Airport, attaches great importance to cleanliness and modern, reliable sanitary technology.

Zurich Airport handles some 25 million air passengers a year. It would be fair to assume that, on average, each passenger visits the toilet at least once. The sanitary infrastructure available to these travelers comprises 1,000 toilets, 500 urinals, 1,500 washbasins and 50 WCs for disabled persons, the latter of which are equipped with shower toilets. Not all the facilities are visited to the same extent, with those at the arrivals area and the bus terminal witnessing the largest number of visitors. Here, the urinals are used on average every three minutes during the 18 hours that the facilities are opened each day.

Intensive maintenance

The greatest challenge for the sanitary facilities is the fact that they are used virtually non-stop. For example, the electronic lavatory taps from Geberit have to be replaced after four to five years as the high-quality chrome plating is literally wiped away by the repeated cleaning each day with microfiber cloths.

The flush and fill valves in the concealed cisterns are also replaced every couple of years. As soon as one of these valves in a toilet facility starts to show the first signs of wear and tear, it is immediately replaced. For preventative purposes, all the other cisterns in the same toilet facility are also simultaneously fitted with new valves.

Proven 1-liter urinal flush However, urine scale is by far the greatest enemy when it comes to toilet facilities. With the most highly frequented urinals, it is quite possible for discharge pipes to become completely clogged with urine scale in as little as two months. As a result, the

traps and pipes on these fixtures are thoroughly cleaned on a monthly basis. The staff at Zurich Airport have tried everything imaginable in an attempt to get to grips with urine scale. The best results were achieved by water-flushed urinals, particularly those with a 1-liter flush.

Flughafen Zürich AG and Geberit have enjoyed a very good partnership over the years. For example, Geberit was able to put a range of new products - including urinal traps and urinal flush controls - to the acid test in the continuously used toilet facilities at the airport. 🗲

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← The Polish National Stadium in Warsaw.

↓ These toilet facilities are

designed to cope with the large number of visitors at half-time.

Installed wherever you wish

Elegant new remote flush actuators



Just because the cistern is installed directly behind the toilet doesn't mean that the toilet has to be flushed from there as well. Geberit remote flush actuators offer the desired flexibility in this regard. They are extremely compact, available in a number of different designs and styles, and can be installed virtually anywhere in the room. The remote flush actuators from Geberit work pneumatically (using air pressure) and therefore do not need electricity. They are suitable for use in public toilet facilities and in private homes.

→ Available in different colors, materials and designs

- → Can be installed anywhere you wish within a distance of 1.7 meters from the cistern
- → Significantly smaller than normal actuator plates
- → Also specially suited for installation in bathroom furniture

15 minutes of peak activity

The new Polish National Stadium was one of the venues for the 2012 UEFA European Football Championship. The multipurpose arena with a capacity of 58,000 cost around 400 million euros to build and boasts perfect conditions for players and fans alike thanks to its retractable roof, undersoil heating and state-of-the-art sanitary infrastructures.

Extended downtimes

The Polish National Stadium features 1,350 toilets and 650 urinals, outnumbering those found at Zurich Airport by a fair margin. However – and this is the major difference –, the toilet facilities at the stadium are used only sporadically, such as during half-time or after the game has finished. During this time, however, all the toilet facilities are pretty much overrun.

By contrast, the sanitary infrastructure is not used at all in the days between major sporting or cultural events. As a result, the stadium is also equipped with 130 sanitary flush units. These ensure that the various pipes are also regularly flushed when they are not in use for an extended period, thus preventing impurities from forming here in the standing water (see also page 20).

High degree of vandal resistance

In addition to the extreme fluctuations in usage, the sanitary facilities in sports stadiums are also sometimes subjected to the brute force of fans who resort to violence as a means of blowing off some steam. This is why all the toilets feature screw-locked actuator plates made of stainless steel. These provide the flush technology installed behind the wall with a particularly high level of protection. \leftarrow



↑ Compact, valuable and elegant: The new Geberit remote flush actuators hide the technology such as the pneumatic cylinder behind the wall.

← The elegant remote flush actuator Type 70 was installed directly under the windowsill to make flushing the toilet as convenient as possible.

↓ The elegant and small remote flush actuator type 01 fits every time. Thanks to its high-performance pneumatics, the dual flush unit offers a high degree of operating comfort.



Objectively and subjectively exceptional

Quality assurance as it should be



↑ One by one, Geberit statics specialist René Gmür carefully lowers the 50-kg-weight plates onto the special frame that is attached to a Geberit Duofix element.

Geberit products satisfy the most diverse quality criteria, whether objective or subjective. This is ensured by means of extensive laboratory tests and comprehensive practical trials.

> People with a passion for cooking are likely to have their favorite knives that are crafted from high-quality steel, sharpened perfectly and fit in the hand as though they were custom-made.

> The products from Geberit follow a similar pattern. For example, the standards and quality requirements defined by the legislature are not only clearly met, but markedly exceeded when possible and practical to do so. Craftsmen can therefore rest assured that they are installing top-quality, safe products. However, this alone is not enough. Only when these high-quality products also feel the part, are easy to work with and can be installed without any hassle can they win the hearts of the craftsmen as well.

Playing it safe

Geberit spares no effort in ensuring it meets all these criteria. For example, a large team of scientific and technical specialists is on hand to support both the development of new products and continuous improvement of existing products. With very few ex-



↑ The deformations caused by the load are measured using laser light

ceptions, all required materials tests, hydraulic tests, long-term trials and building technology and acoustics tests can be carried out in the company's own accredited laboratories. This also includes the static testing of installation elements.

According to European standards, wall-hung WC ceramic appliances and bidets have to be able to bear a weight of up to 400 kg. As a result, the Geberit installation elements to which these ceramic appliances are attached also have to be designed to handle such a heavy load. "Although our draftsmen carry out extensive computer simulations, weaknesses that had not been revealed by the computer sometimes come to light afterwards during the tests in the building technology and acoustics laboratory," explains statics specialist René Gmür, the man responsible for carrying out such tests at Geberit. All new models and all new versions of an installation element are therefore subjected to extensive statics tests before being approved for mass production.



↑ Plumbers and tilers from four different countries install prototypes of the new Geberit shower channel CleanLine at Geberit's building technology and acoustics laboratory.

Observing customers in action

The fact that Geberit products bear all the required official quality labels is a major plus for the craftsman. "A complete system from a single manufacturer that has the required approvals for all the individual components makes things a lot easier," explains Oswald Vogel, site manager at the major northern German housing association GEWOBA AG.

But Geberit doesn't stop there. To ensure that the products prove successful in everyday use on the construction site - and all in the most diverse markets –, they are installed by craftsmen from various countries in realistic practical trials. Plumbers, screed layers and tilers from four different countries were recently invited to the building technology and acoustics

laboratory in Jona to install the new Geberit shower channels CleanLine. Geberit provided the craftsmen with prepacked prototypes of the product and a draft of the installation manual. The craftsmen had to bring along tools and building materials such as cement and tiles themselves.

During such practical trials, which generally run on for several days, the product developers at Geberit have ample opportunity to carefully observe the craftsmen in action. "These trials continually lead to improvements to product details and changes to the installation manual," sums up Andreas Schläpfer, Head of Application Engineering at Geberit. "These details often turn out to be precisely the features that the craftsmen value so highly in the Geberit products." ←



The solution for floor-even showers

While many shower channels look beautiful, dirt and bacteria accumulate under the entire length of their covers. In contrast, the new Geberit shower channels CleanLine not only look the part, but also offer an intelligent solution to this hygiene problem. The water flows on the shower channel to the drain with no hidden places for dirt to accumulate.

Installing a CleanLine shower channel is uncomplicated, and the result is as securely and permanently sealed as a conventional floor drain. The shower channels can be cut to the size of the respective showering area and can be installed both very close to the wall or in the middle of this area without any problems.

- → Blends in perfectly with all flooring materials thanks to its stainless steel design
- → Practical, easy-to-clean comb insert
- → Good discharge capacity thanks to its hydraulically optimized drain





↑ The timeless design of the Geberit shower channel CleanLine ← The Geberit shower channels CleanLine are designed so that they can be easily built into the screed of a floor-even shower in a permanently sealed manner.

Tailored to meet customer requirements

Fully automatic hand hygiene system for food retail locations and food service operators



↑ The customers trust that the staff at this fast food restaurant observe exemplary hand hygiene practices.

Guests at restaurants and other food service locations all trust that the staff has clean hands. The U.S.-based company Ecolab Inc. is aiming to help ensure that nothing is left to chance by introducing a new automated touch-free water and soap delivery system. The Geberit subsidiary **Chicago Faucets was the development partner** for this project.

Ecolab Inc.

Ecolab Inc. is the world's leading provider of products, technologies and services for protecting people while also protecting and optimizing the use of vital resources such as water, food and energy. As such, the company also offers comprehensive cleaning and hygiene solutions for hotels, restaurants, breweries, food manufacturers, laundries, and hospitals. With sales of USD 13 billion in 2013. Ecolab operates in more than 170 countries and employs over 45,000 people around the world.

The appetizers and the main course are delicious and the wine is excellent. The company outing is once again on course to be a complete success. That is until the following morning, when the majority of the staff is laid up in bed with severe gastrointestinal complaints. Continuing the outing is out of the question. The culprit for the fiasco is quickly found, namely the meal they ate together the previous evening.

Better safe than sorry

High hygiene standards are expected of cooks, waiters and those who handle food. This includes well-washed hands that are as germ-free as possible. With this in mind, the global company Ecolab, which specializes in cleaning and hygiene solutions, has developed Syncra - a touchless hand hygiene system. Syncra offers a fully automatic hand-washing program comprising the following steps: initial rinsing of hands, dispensing of one or two shots of soap, scrubbing of hands and finally a thorough rinsing. The time required for each of these steps, the water temperature and the quantity of soap dispensed can be individually programmed.

Automating the hand-washing process can help improve compliance and reduce the risk of transmitting illnesses - providing a new level of cleanliness assurance. Syncra's timed delivery also saves on excessive water use - dispensing just the right amount of water for a thorough clean. Ecolab Inc. offers this new system to restaurants, food service providers, and other customers beginning in the USA

Faucet specialist and development partner

Chicago Faucets, a leading USA manufacturer of faucets for use in public areas such as hospitals and schools, was instrumental in partnering with Ecolab Inc. on the development of Syncra. This also included producing a range of prototypes that were tested in comprehensive practical trials. "Although we are optimally equipped to



↑ The new, fully automatic hand hygiene system Syncra was developed by Ecolab Inc. in collaboration with the American Geberit subsidiary Chicago Faucets.

produce faucets according to customer specifications, the development of Syncra presented us with numerous new challenges," explains David Vagasky, Vice President of Engineering and R&D at Chicago Faucets. "This is why we are all the more delighted that Ecolab has now also commissioned us with the mass production of Syncra." +

Chicago Faucets

In much the same way that toilet and urinal flush systems from Geberit are frequently found in toilet facilities in Europe, the same also applies to faucets from Chicago Faucets in the USA. Their products are a regular feature in hospitals, schools and other institutional buildings across the country. The faucet manufacturer with a long-standing tradition was acquired by the Geberit Group in 2002. The company employs over 500 people at its four production sites and at its headquarters near Chicago.

Design and comfort

A fundamental change in thinking in European bathrooms



↑ Shower toilets are no longer uncommon in the bathrooms of four-star and five-star hotels.

Given the current state of technology, there are no longer any reasons for a comfortable shower toilet to differ in appearance from a normal, elegant toilet. The AquaClean Sela and the brand-new AquaClean Mera from Geberit are a perfect case in point. 57 years ago in Switzerland, the first shower toilet was patented. Not that cleaning one's bottom with water was unheard of before this time. Indeed, bidets had long since been a standard feature in bathrooms in countries such as Italy, Spain, France, and Greece as well as in Latin America and several Arab countries. In many other regions, most toilets had a hose that fulfilled the same function.

A huge success in the Far East

The first shower toilets opened up a whole new level of comfort, with the relatively laborious procedure faced by those using a bidet or a hose disappearing entirely thanks

to the automatic shower function. Despite this, the general public in Switzerland and Germany was not yet prepared to spend money on greater comfort and hygiene in the bathroom back then, with a color TV or a vacation in the Mediterranean still very much top of the wish list. As a result, shower toilets led something of a niche existence for many years.

In 1978, the patent protection expired and Geberit launched the first WC enhancement solution with shower function. A short time later, the Japanese manufacturer Toto introduced its first shower toilet. In both cases, the focus was more on functionality Melanie Winiger, actress, TV host and brand ambassador for Geberit AquaClean

"I'd rather have a shower toilet than a new handbag!"



↑ Geberit showcases its AquaClean shower toilets at a range of consumer fairs each year.

than design, with the appliances therefore coming across as technical and bulky. Despite this, shower toilets proved a major success in Japan and Korea, as highlighted by the fact that around 70% of all households in Japan and some 30% of all households in Korea now have one. By comparison, this figure is estimated at barely 10% in Switzerland – the country of its inventor.

Second generation of users on the way

It would be wrong to assume from this figure that the shower toilet business in Europe has not yet really left the starting blocks. Indeed, precisely the opposite is the case. Many European countries have witnessed a considerable gain in momentum in terms of sales performance in recent years and are seeing positive growth rates. Educational work on cleaning with water when using the toilet - an ongoing project and one that was initiated by Geberit - has contributed significantly to this success. What has long since been the most natural thing in the world for Southern Europeans who grew up with a bidet is no longer a taboo in Central and Northern Europe.

A generational effect is also becoming increasingly noticeable. Young people who grew up in a house with a shower toilet do



↑ Wholesalers and sanitary professionals also have the opportunity to carefully examine the shower toilet product range from Geberit at various trade fairs and exhibitions.

European market leader

Today, Geberit is the leading provider of shower toilets in Europe. Those interested in learning more about the Geberit AquaClean complete solutions and adaptable shower toilet seats can now check them out at over 3,500 showrooms and even test them in many places.

To introduce potential end users to the topic of cleaning with water, Geberit employs specialist customer consultants in eleven countries. Together with numerous local AquaClean partners, they presented the AquaClean shower toilets to a large audience at over 1,000 events, exhibitions and consumer fairs in 2014 alone.





↑ Just how perfectly design and function can go hand in hand is highlighted by the inner geometry of the new AquaClean Mera. This ensures that flushing of the rimless WC ceramic appliance is quiet, very thorough and does not cause any water splashes.

not wish to do without this comfort when they fly the nest or buy a home of their own. However, they often demand higher standards than their parents did when it comes to the design of their bathroom fixtures.

A great deal of know-how

A huge amount has changed in recent years, particularly with regard to design. While the first shower toilets were heavy, monstrous appliances, the latest generation of complete solutions is now virtually identical to a normal toilet at first glance yet contains an incredible amount of technology.

The new Geberit AquaClean Mera, available as from September 2015, highlights this progress in impressive fashion. Virtually unrivaled in terms of comfort functions and refinement, the new shower toilet from Geberit exudes elegance and appears to float weightlessly above the floor. When developing this appliance, Geberit spared no effort and utilized its many years of experience in the shower toilet sector, its broad technical know-how and its thorough understanding of customer needs to the full. 🗲



↑ Not all shower sprays are the same. Geberit has further perfected the shower experience with its WhirlSpray shower technology.



↑ A dryer function takes the feeling of comfort to an all new level.



↑ Effective odor extraction also adds to the feeling of well-being.

Mia Odermatt, a sales promoter who grew up in a house with a shower toilet

"A wonderful, practical wellness experience every time."

A masterpiece in function and design



← The remote control is clear and fits comfortably in the hand. All inputs can be made with one hand. One click of a button is all that is required to call up the personal settings.

The new shower toilet Geberit AquaClean Mera

Featuring the very highest level of technology, design and comfort, the AquaClean Mera shower toilet from Geberit sets new standards in every respect. The design of the compact complete solution impresses thanks to its high-quality materials, soft lines and flowing transitions. The innovative technology inside the shower toilet ensures that electricity and water are used economically and allows users to adjust all functions according to their personal preferences. The shower toilet, which was developed and manufactured by Geberit in Switzerland, will be available from September 2015.

- → Hybrid hot-water system for a constant supply of warm water
- → Patented WhirlSpray shower technology for a soft, vitalizing shower spray
- → Separate lady wash, protected when not in use
- → Rimless ceramic appliance with asymmetrical inner geometry for a quiet and thorough flush without splashes
- → Automatic opening and closing of the WC lid
- → Ergonomic, heatable WC seat made of duroplast
- → Built-in descaling system for the spray arm and hot-water system
- → Discreet orientation light in individually programmable colors
- → Effective odor extraction unit with a durable ceramic filter
- → Concealed electrical and water connections
- → Suitable for all Geberit installation systems and Monolith sanitary modules





↑ Thanks to its state-of-the-art technology and excellent design, the Geberit AquaClean shower toilet is very compact. The chrome-plated design cover (also available in white) creates the impression that the appliance is floating.



Will someone flush the pipes?

Preventing germ formation in water pipes

Legionella bacteria claim the lives of thousands of people in Europe each year. The only way to become infected with these bacteria is by inhaling them, which can occur in the shower. Geberit has developed solutions to prevent this. ← Each year, many hotels close sections of their building (or close entirely) during the offseason. To prevent bacteria and germs from multiplying in the drinking water system during this period, special precautions need to be taken. One solution is to install automated sanitary flush units.

Potable water is never completely germfree. However, the concentration of bacteria and germs is normally so low that it does not pose a threat to the human immune system. Only when these pathogens are able to multiply does a serious health risk arise.

Water temperatures of 25 to 50 degrees Celsius are optimal conditions for bacteria such as legionella. They are hardly able to multiply in colder or warmer water. However, even under optimum conditions, it takes some time for the population of legionella bacteria to reach a level that is hazardous to health. This is precisely where the Geberit sanitary flush unit for water pipes comes into play. This device, which can be programmed via smartphone, flushes the water pipes before the bacteria start multiplying to dangerous levels.

Targeted and water-saving

So how exactly does it work? Let's say, for example, a large hotel in the Mediterranean opens only one of its two wings during the off-season. The other wing therefore remains unused for months on end. The water in the water pipes leading to the numerous sanitary units in this hotel wing stagnates and is heated up slightly due to the relatively warm ambient temperatures. Legionella bacteria can now easily multiply in these pipes – that is unless a Geberit sanitary flush unit is on hand to remedy the situation.

This unit springs into action when the water in the connected pipes has been stagnating for a certain period of time or when it becomes too warm. The flushing of the pipes is carried out in a highly targeted manner and does not require much water.

→



← In the shower in particular, it is important that the water contains as few germs and bacteria as possible.

Operation via smartphone



Modern sanitary flush unit for safe drinking water

In the drinking water systems at hotels, sports stadiums, hospitals, barracks, and school buildings, entire pipe sections can go months on end without being used. In order to prevent microbial contamination of these water pipes, Geberit offers a fully automated sanitary flush unit that is now even more versatile and powerful. The control electronics have been completely revised in order to cope with the most diverse situations. All settings can now be programmed via smartphone. The control unit itself is able to process the signals from various internal and external sensors.

- → Can be connected to up to two water pipes
- \rightarrow Flexible flush performance of 4, 10 and 15 liters per minute
- → Compact design and a service opening that can be securely locked
- → Connections for external temperature and volumetric flow rate sensors

Classic areas of application for the Geberit sanitary flush unit include hospitals, schools, sports stadiums, barracks, retirement homes, holiday homes, guest houses, and hotels – as highlighted above. With the entry into force of stricter provisions in the German Drinking Water Ordinance – the most stringent of its kind in the whole of Europe –, the list of possible applications has grown in recent years.

Expertise in drinking water hygiene

As a leading manufacturer of potable water supply systems made of metal (stainless steel and copper) and plastic, Geberit is an expert in various aspects of drinking water hygiene in building installations. As such, the company has developed various solutions to protect water pipes from impurities and microbial contamination. Pipes and fittings are equipped with protection plugs before leaving the factory, thus protecting them from dirt in the warehouse or on the construction site. Furthermore, special hygiene filters protect the pipes from impurities during the initial filling and pressure test. Last but not least, fully automated sanitary flush units prevent bacterial populations from being able to multiply in the water pipes afterwards. +



↑ Drinking water supply systems from Geberit take full account of today's stringent hygiene requirements.



Christian Buhl, CEO

Outlook

Is there a particular highlight among the latest new products?

If there is one product that stands out among the new innovations, then it would have to be the shower toilet AquaClean Mera. This product will be available from September 2015 and will set new standards both in terms of design and with regard to function and comfort. Our customers are certainly in for a treat.

What does Geberit have in store for next year?

Just like any other year, 2016 will see us launch several important new products as well as numerous additions to existing product ranges. All these products are progressing as planned in our development pipeline.

Will this include new products developed together with Sanitec?

One of Geberit's major strengths is sanitary technology behind the wall, while Sanitec offers impressive products that are installed in front of the wall. It stands to reason that we will develop solutions that combine these areas of expertise. However, expecting new products to emerge within just a year would be certainly pushing it. Despite the great enthusiasm about our common future, a new product that satisfies all our requirements is not something that you can simply conjure up overnight – not least because of our credo of never compromising on quality and reliability. ←



