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 Full range of state-of-the-art products for elevated reservoirs

## Full range of state-of-the-art products for elevated reservoirs



*Installation example of "active forced ventilation" in the elevated reservoir Utzenaich, Austria*

Drinking water supply structures are in most cases erected by construction companies as principal contractor. When construction companies receive the order for building a drinking water reservoir, they need a partner who can supply both high-quality products and the expertise required to provide economical solutions with maximum customer satisfaction.

Our company has been committed to the development and supply of equipment for drinking water reservoirs for more than 45 years already. During these many years, we have developed a complete line of stainless steel equipment in cooperation with the competent authorities, plant operators and planners. We have continuously optimised the products to ensure they always meet the very specific requirements of drinking water supply projects. Our basic approach is to offer products with a service life that is at least as long as that of the concrete structure itself. Furthermore, it is of great importance for us that HUBER products meet all relevant requirements in terms of hygiene, functional reliability and safety for men and environment.

Drinking water is our most valuable resource and therefore deserves adequate protection against any impairment. Reasons for water impairment can be the use of unsuitable built-in components or poor workmanship of the components. Properly processed and optimally finished stainless steel is probably the most suitable material for this field of application. Due to its smooth and hard surface there is hardly any possibility of migration.

Undesired "visitors" of a drinking water reservoir must not get any chance to enter the structure. The required security for the drinking water structure is ensured by HUBER safety doors TT2 of resistance class RC3 and RC4 in accordance with DIN EN 1627.

The advisory bodies of the State Offices of Criminal Investigation recommend for water supply installations

- with burglar alarm system: doors resistance class RC3
- without burglar alarm system: doors resistance class RC4.

But not only drinking water supply structures require special protection against unauthorised access. Remotely located facilities, such as spring tapplings or well shafts, are under constant threat of unauthorized manipulation. A variety of attack-proof manhole covers is therefore part of our program of stainless steel equipment. The manhole covers are also certified to DIN EN 1627, resistance class RC3.



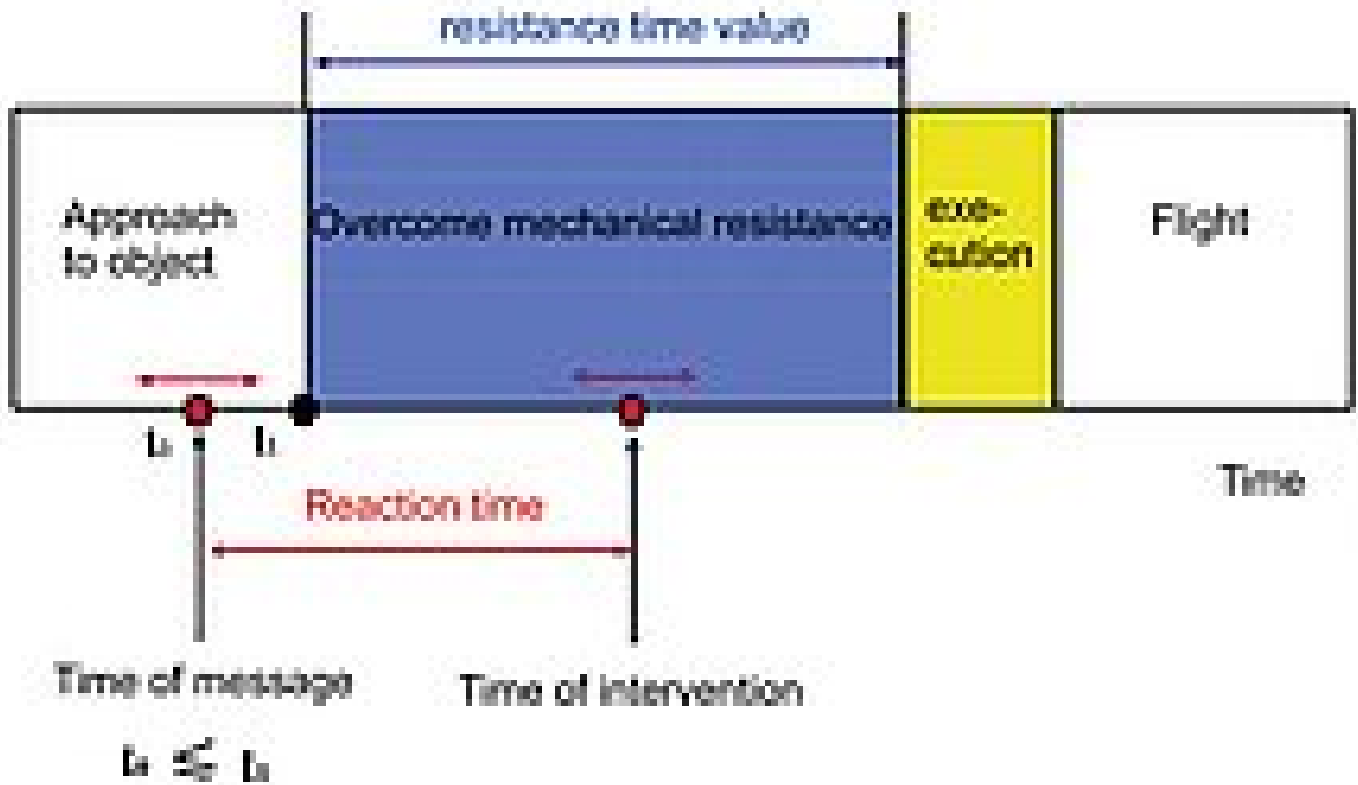
*Attack-proof security door TT2, certified to resistance class RC3*

The resistance value in time is the time an expert needs to break a mechanical barrier with the use of appropriate tools. In connection with burglar alarm systems, the resistance value in time is the time between alarm release and burglary. This time should be longer than the time the action force needs to reach the place of attack for intervention. Besides, the offender will probably stop the burglar attempt if the barrier is too resistant.

Generally, stable equipment will more likely deter burglary attempts and resist long enough if the worst comes to the worst!

HUBER offers various designs of robust interior doors made of stainless steel, like for example the HUBER Water Chamber Door TT1.1.W which has especially been developed as an access door for water chambers. The door allows for easy inspection of the water surface. These doors intended for the installation in such sensitive areas provide more special features than the standard HUBER stainless steel doors and we use for them exclusively sealings which are certified to DVGS W270 standards.

Another example is the HUBER Chlorine Room Door TT5. Due to its special resistance to increased chlorine concentrations, this type of door with a special coating is perfect to be used as an access door to chlorine rooms.



*Mechanical resistance can be decisive*

Access to the water chamber for maintenance and cleaning work is possible without any risk in the bottom area through a HUBER Pressure Door TT7. With the use of a pressure door, it is not necessary anymore to enter the chamber from the top on a ladder which is often wet and slippery. Especially if tools or auxiliary means for cleaning (such as a high pressure cleaner) are required in the chamber, access through the pressure door is much easier and above all much safer! The pressure door is completely made of stainless steel and closes absolutely tightly. It is installed flush into the casing already during the concrete work. It is therefore immensely important that built-in products such as pressure doors have the same service life as the concrete structure itself. Expensive and time-consuming repairs and refurbishing are excluded from the outset.

HUBER pressure doors ensure that these high requirements are met as they are carefully manufactured under precisely the right conditions for the material and pickled in an acid bath and passivated. HUBER offers also a special frame for bolted fixing for quick and easy retrofitting of tanks under refurbishment. When existing tanks are refurbished, they are frequently retrofitted with such a HUBER door which provides access at floor level. HUBER offers well-thought-out solutions also for lined containers. The pressure doors are operated with locking levers or optionally with a central lock. For safety reasons, both locking options can be operated by the user both from the pressureless outside and from inside (the pressure side). It is a matter of course that we use exclusively sealings certified to DVGW W270 standards to guarantee maximum hygiene.

Air filtering should be considered a basic necessity for drinking water reservoirs. Why air filtering? Pressure is generated when water is filled in or taken out of the tank. It must therefore be possible for the air to stream in and out through ventilation openings. However, the ambient air contains various organisms, such as germs, spores, pollen and fungi. These organisms may lead to germ formation and make the water unsuitable for human consumption (especially pregnant women and infants). To prevent germ formation, the air must be filtered for pressure equalisation in the drinking water reservoir.

The ventilation opening is securely protected against unauthorised access by an attack-proof louvre. Now, as such plants have increasingly been installed over the past 15 years, the use of an air filter plant should meanwhile have become state of the art. HUBER was active and leading in this field right from the beginning and offers tailored solutions, also for retrofitting existing plants. HUBER air filter plants with HEPA filter of filter class H13 (HEPA = High Efficiency Particulate Filter, filter for suspended particles) achieve a separation of at least 99.95% according to the requirements of DIN 1822 2011. Such high requirements for air purity have by now only been required as standard for operating rooms in hospitals.

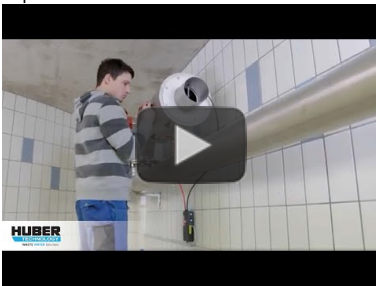
Another milestone in our range of HUBER products for elevated reservoirs is the system of "active forced ventilation". This system for routing the supply and exhaust air consists of the HUBER air filtering technology combined with an adjustable ventilator. It is an easy yet innovative solution to prevent excessive condensation in water chambers.

**Use our competence and expertise for your cost advantage! Contact us!**

Find below an informative video on comprehensive HUBER stainless steel equipment for safety in drinking water reservoirs:



*HUBER pressure door TT7 with inspection window and spotlight*



HUBER drinking water storage tank equipment

<https://www.youtube.com/watch?v=qYmQS7umU-0>

**Related Solutions:**

- [HUBER Solutions for Water Storage](#)

Huber Technology (Pty) Ltd  
Company Reg. No.: 1992/006606/07

PO Box 9813  
George, 6530  
South Africa

Phone +27 44 874 4242  
Fax +27 44 874 3658  
[huber@lantic.net](mailto:huber@lantic.net)  
<http://www.hubersa.com>

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