

EDITORIAL

SALES STRUCTURE

Closer to the customer

A sign of a successful product is when everybody wants to have it. Ok - perhaps not everybody. Just almost everybody! In any case, the drinking water storage system with stainless steel tanks is one such product. We are currently dealing with enquiries from all over Germany. This has made routes to the customer longer, and has significantly increased the length of time taken up by visits.

The company is now reacting to this new situation with a revised sales structure. Our medium-term aim is to build up a sales network divided up into regions. This means that during the information phase, customers will be dealing with just one contact partner in the company, who will also handle enquiries and compile quotations.

The first step has been taken by setting up the new sales office in Paderborn. This is manned by Maik Hagedorn and is responsible for the North Germany region. South Germany is still covered from our headquarters in Ravensburg. For a transitional period, all existing contact partners will of course still be available in the usual way.

A further planned step will be to network the sales activities of RWT GmbH and Hydro-Elektrik GmbH, and to make use of synergy effects. All this will make 2009 a time of change. We are convinced that these changes will in future form a basis for us to be able to serve our customers better and more quickly. In any event - recession or no recession - we are looking to the future with optimism. After all, we have an extremely successful product in the shape of our tank system.

We hope that you enjoy reading about this success story below.

Manfred Brugger

TECH TALK

EXPERIENCE REPORT

8 years of experience with stainless steel tanks used for drinking water storage

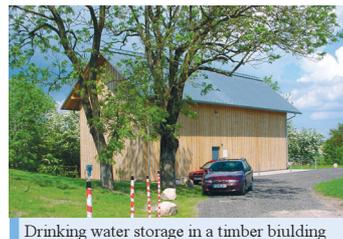
When the first drinking water storage facility with stainless steel tanks was put into operation at the beginning of 2000, hardly anyone foresaw that this storage system would experience extremely successful development. Since then, around 80 plants of various types have been realised throughout Germany, with 140 tanks and a total volume in excess of 50,000 m³.

Drinking water storage facilities are often designed as high-level tank set-ups.

One particularly bothersome subject for system operators is the unavoidable renovation costs associated with concrete tanks, which can add up significantly over their service life. Depending on the damage and the size of the object that needs renovating, these costs are between approximately 200 €/m³ to 1400 €/m³ useful volume.

This is on top of the uncertainty that the extent of the damage often does not become apparent until after work starts, which means that the actual costs are frequently way above the estimated costs. Encouraged by the fact that many concrete tanks had already been lined with stainless steel plates at the end of the 1990s, the idea came about to use actual stainless steel tanks in place of just linings, and to house them in comparatively simple, low-priced and durable building structures.

An excellent cost/benefits ratio
When investment decisions are made, it is often assumed (without



Drinking water storage in a timber building

actually looking into it) that structures based on the material „non-corroding stainless steel“ are expensive. In fact, even taking into account higher investment costs, it is often far more economical to use „non-corrosive stainless steel“ because there are hardly any follow-up costs. For example, an average service life of 50 years can be expected for high-level water tanks. However, practice has shown that such a service life can only be achieved with conventional tanks if regular maintenance is performed (maintenance intervals of between 15 and 30 years) with the associated costs (summa summarum higher than the investment costs).

Great hygienic safety
Besides the financial advantages, the stainless steel tank solution

also offers other unbeatable advantages from the user's point of view. Stainless steel offers no feeding grounds for germs, which makes it hygienically stable. Its smooth surface prevents deposits and can be cleaned easily with high-pressure water jets. „Non-corrosive stainless steel“ is not only durable thanks to its high corrosion resistance - it also requires almost no maintenance. Stainless steel also has a high mechanical load-bearing capacity and it is flexible, which means that later changes are also possible without any major cost and complexity.



Stainless steel drinking-water tank

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NEWS & TRENDS

MAJOR PROJECT

In collaboration with Hydro-Elektrik GmbH, RWT GmbH is building a new water treatment line for the power stations division of Salzgitter Flachstahl AG.

The complete order covers delivery and installation of a raw water filtration system (350 m³/h), a demineralisation system (200 m³/h) and a condensation treatment system (140 m³/h). The total order, which is worth around € 3,100,000 includes the complete control technology based on a high-availability PCS7 system for both the new and existing water treatment lines.

BØ KOMMUNE - SUPPLIES BEST DRINKING WATER

Along with two other waters, the water from the new waterworks of the Norwegian community of Bø has been judged to be the best drinking water in the „Groundwater“ class.

With a score of 41 points out of a possible maximum 45, the water is firmly in the top class.

The treatment technology for deacidification, iron removal and demanganisation (300 m³/h) was supplied in its entirety by Hydro-Elektrik GmbH.

The ozone filtration system with three filters has been on line since October 2007.

During the summer, it also supplies this award-winning water to Bø Sommarland - one of Norway's largest leisure centres.

Hydro-Elektrik AS and Hydro-Elektrik GmbH congratulate Bø on this award.



The certificate is presented to the Bø Kommune



PERSONAL NEWS

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Spoiled for choice - which steel?

Non-corrosive steels are alloy steels with a chromium content of at least 10 %. When combined with oxygen, a dense and chemically resistant chromium oxide layer forms on the workpiece surface. This means that the water is to a certain extent isolated from the iron atoms by a separating layer.

To date, V2A steels and V4A steels have been primarily used in the field of drinking water supply. Until a few years ago, so-called duplex steels were still relatively unknown in water management. Due to their much higher chromium content of around 22 %, these steels have excellent corrosion resistance.

Wood, metal or non-combustible construction

The variable system allows planning creativity and optimum adaptation to the prevailing local situation. In all cases, the structures consist of a concreted lower section (flat slab or trough) and a hall built on top.

The hall can be built as a timber-pillar construction, as an industrial hall with insulated metal panels, from prefabricated concrete elements or from in-situ cast concrete/masonry.

The minimal incursion into the ground is advantageous when building on a rocky surface.

The building's design must be insulated, windproof and secure against insects.

Turnkey construction

Some of the approximately 80 plants were of the turnkey

INDUSTRY

variety, and some were put out to tender to individual trades.



Drinking-water tank incorporating a non-combustible building design

The turnkey construction of a complete tank system offers clear advantages - both for the customer and the contractor.

While the customer is primarily concerned about planning reliability, costs and the schedule, interface problems in particular are reduced as far as the contractor is concerned.

Normally, after most of the building work has been placed in the hands of local companies by the general contractor, the appointed general contractor has the responsibility of overall project management. This also means that the amount of planning work can be significantly reduced. Another advantage is that the project managers of the general



Basic structure of the storage system

contractor have wide-ranging experience of comparable systems, and can thus identify and eliminate problems early.

Positive experience with construction and operation

With good planning and organisation, realisation periods of approx. 3 months are possible in the case of small plants, and approx. 6 months in the case of large projects. These are times that could never be achieved with the construction of concrete tanks.



Semi-automatic cleaning system of the storage tank

Besides the comparatively low building costs and the short construction times, as far as operation is concerned it is particularly advantageous that both the inside and the outside of a tank can be checked at all times. A survey of experiences with this system revealed that expectations had, for the most part, been exceeded. The survey covered the structure, the tank system, the ventilation system, the installation and various general questions. The summary that can be drawn after 8 years is that this system has a great future ahead of it.

DID YOU KNOW?

Reducing costs by optimising efficiency

Pumps consume enormous amounts of energy. Where pumps have long service lives, energy consumption costs account for 96% of a pump's service life costs. One pump with a motor output of 16 kW consumes approximately 800,000 kWh over a service life of 50,000 h.

Assuming an energy price of 15 Cents /kWh, this means costs of 120,000 Euros - for a unit with a purchase price of just 5,000 Euros. In many cases, the huge influence that the efficiency of a pump unit has on actual consumption costs is completely underestimated. Reducing the efficiency of the aforementioned pump by 20% increases its consumption costs

from 120,000 Euro to around 160,000 Euros or more. Operators frequently have no idea about the efficiencies and operating points at which pump units are operated. As a result of changed operating conditions (e.g. changed groundwater level, a changed network or pressure increases etc.), units that were originally configured correctly may no longer perform optimally. As a result, supposed savings often turn into real money-wasters. If your pump consumption costs are too high, you should have the existing system analysed. Analysis costs and any pump replacement costs pay for themselves within a relatively short time. Talk to us.

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