

PipeLine

HOBAS® Potable Water Tanks

- 1 | HOBAS® Tank Secures Potable Water Supply in Lower Austria, AT
- 4 | A Steadfast Solution with HOBAS® Potable Water Tanks
- 5 | HOBAS® Potable Water Tanks on the Rise in Europe
- 6 | HOBAS® System Building Units
- 7 | High Quality in Form and Function in the Czech Republic
- 8 | Did you know... | Info | Our New Baby Giant

From 0 to 250 Cubic Meters in Only 8 Hours HOBAS® Tank Secures Potable Water Supply in Lower Austria, AT



Not only the increasing number of inhabitants but also the increasing number of swimming pools used to cause water shortages in Karlstetten (Lower Austria) every year in early summer. HOBAS however came to the rescue with a potable water tank holding 250 cubic meters. Installed in record time of only 8 hours, it ensures a reliable potable water supply and even serves as an impressive reference project for visitors from abroad.

The market town of Karlstetten lies in the Mostviertel region of Lower Austria on the southeastern edge of a hilly area, Dunkelsteinerwald. Set in idyllic countryside about 10 km from the provincial capital of St. Pölten, it is home to over 2,000 people - with the figure steadily rising in recent years. As there are no lakes for swimming in the immediate vicinity, many homeowners in Karlstetten have their own pools that they fill every year beginning of summer. This caused considerable shortages in the potable water supply in recent years, making an extension to the water network essential, especially in view of the rising population figures.

To increase capacity, the investor opted for a HOBAS Potable Water Tank. The professional advice provided by HOBAS Experts, the prefabricated units for a rapid installation, and the fact that the tank's capacity can easily be extended convinced the customer. The municipality of Karlstetten decided on a tank with a capacity of 250 cubic meters, which can be increased to 320 cubic meters to cater for future needs. In concrete terms, the tank consists of a 12-meter-long valve chamber and three 21-meter-long potable water chambers. There is also a connection for a fourth future chamber if required.

Very Strict Quality Standards

HOBAS Potable Water Tanks are manufactured to comply with the very strict legal requirements of the destination country. The standards they meet in Austria are ÖNORM B 5161, ÖVGW PW 407, and GRIS GV 14. This means that HOBAS Potable Water Tanks are entitled to bear the quality mark GRIS W 1.277.

In addition, HOBAS has its own quality standards which are even stricter. "When it comes to potable water supplies, we simply do not compromise. We are talking about people's health here and only the highest standards are good enough for us," says Doris Strohmaier, managing director, making the HOBAS Group's position very clear. And this commitment is taken seriously: each raw material used in producing the pipes, each process step, and each part bought in is carefully documented, must be certified for potable water, and can be traced at any time afterwards. Extensive tests on the pipes and fittings as well as exact records of transport and installation ensure that the client receives excellent quality and the local population can rely on a safe supply of impeccable potable water.

HOBAS Experts have a wealth of experience with potable water tanks under their belts and can provide clients with support in all areas from planning through design to installation. The tanks are prefabricated at the factory and thanks to their well thought out modular design they can be quickly assembled on site without any special equipment. Fabrication from order release to loading on the truck takes four to six weeks, depending on the tank size. The largest tanks supplied by HOBAS to date are around 300 cubic meters. Much larger ones are currently being planned and as far as size is concerned there are no limits. Delivery is generally just in time for installation, which does not require large storage areas or disrupt traffic. Their low weight and compact wall structure compared with other materials enable all the tank units to be transported by flatbed truck and not classed as expensive oversize loads requiring escort vehicles.

Installing the Tank

Contractors Held & Francke were responsible for installing the tank in Karlstetten. First they excavated a pit measuring some 24 x 9 meters and placed a layer of the standard bedding material used for HOBAS Tanks: gravel with a grain size of 8 to 16 mm. Punctually at 7:30 in the morning, the truck with the first part of the valve chamber drew up. The module with a width and height of 3 meters and a length of 6 meters was joined to the second part of the chamber using a coupling. A stainless steel door with louvers gives the water technician easy access to the chamber for carrying out any maintenance work required at a later date. As soon as the two parts of the valve chamber were connected and installation complete, work began on joining the potable water tank. At the same time, the fitter contracted started installing the interior piping and the instruments.

Transport of the modules was carefully coordinated: the trucks were sent off on the 380 km route from HOBAS Austria in Wietersdorf to arrive in Karlstetten just in time. As with every installation of potable water tanks, HOBAS Experts were also on site here all the time, supervising the construction work and answering the client's questions. In addition, whenever tanks are installed HOBAS also provides the hoists and ropes needed for joining the pipes. The contractors did not therefore require any special equipment in Karlstetten. The heaviest modules were the two parts of the

Year
2010
 Construction time
8 hours
 Storage capacity
250 m³ (can be increased)
 Water tank length
3 x 21 m (can be increased)
 Pipe Specifics
DN 2400, PN 1, SN 5000
 Application
Potable water tank
 Installation
Open cut
 Client
Karlstetten council
 Contractor
Held & Francke
 Benefits
Prefabricated parts, low weight, just-in-time delivery, rapid installation without any special equipment





valve chamber - a simple truck-mounted crane was all that was needed here to lift the parts weighing 6 tons each. Within a period of only eight hours, all the parts of the potable water tank were successively delivered and installed by only four of the contractor's men. While the tank pipes were backfilled on the outside with crushed stone the next day, the fitter finished the piping work inside the tank. The project was thus completed and the tank ready for use in only two days.

HOBAS Potable Water Tanks blend in with their surroundings and are only recognizable on closer inspection. In fact, the burglar-proof access door to the valve chamber is the only visible sign of the durable tank in Karlstetten. After backfilling, the excavated pit can be covered with grass or other plants. Even heavy agricultural machinery can be driven over the HOBAS Tanks made of centrifugally cast GRP pipes, unlike the GRP products supplied by other manufacturers.

Both the client and contractors were impressed by the quick and easy installation of the tank and professional project management on the part of HOBAS. And even visitors from abroad have expressed an interest: the mayor of Karlstetten Anton Fischer and water technician Josef Speiser recently showed a delegation from Szombathely in Hungary the modern water supply facility. The first potable water tanks were then installed in Hungary at the end of 2011.

Would you like to see the quick and easy installation method in action? Then open the video below to see the highlights of the installation day in only 6 minutes.

Fmd: hobas.austria@hobas.com

„When it comes to potable water supplies, we simply do not compromise. We are talking about people's health here and only the highest standards are good enough for us.“

Doris Strohmaier
Managing Director HOBAS Group



Seismic Activities Cannot Shake Water Supply for Čezsoča in Slovenia - A Steadfast Solution with HOBAS® Potable Water Tanks

A sustainable solution for water supply has been found for the settlement Čezsoča of the Slovenian municipality Bovec in the course of the region's funded, potable water project in October 2011. A HOBAS GRP Water Tank with 114 m³ capacity has been installed in merely 5 hours and will last for at least half a century despite the region's seismic activities.

Čezsoča lies 4 km far from the closest potable water supply line in the municipality Bovec. Instead of letting the inhabitants wait too long by establishing a cost-intensive 4-km-long pipeline, the municipality Bovec and the water company Tolmin decided to construct a reservoir drawing high quality water from a well nearby the settlement.

The strong seismic activities of the region that occur periodically called for a material and structure that would be able to absorb ground movements. A rigid structure may crack when shaken by earthquakes which would eventually let water from around the reservoir seep in and contaminate the fresh water. A speedy installation was a further major precondition for the investor to approve the construction. The perfect match was found in a HOBAS Potable Water Tank consisting of two separate water chambers, with each 57 m³ capacity, and a valve chamber. Thanks to the material's elasticity as well as the ability of the joints to accommodate movements the system remains tight. The relatively light weight of the DN 2400 sections and push-to-fit couplings moreover enabled the constructor to assemble the HOBAS Potable Water Tank in five hours only.

Fmd: ernest.skok@hobas.com



| | |
|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Year of construction | Client |
| 2011 | Municipality Bovec and Water Company Tolmin |
| Scope of product | Designer |
| Water tank for potable water of 114 m³ capacity | Cestno Podjetje d.d. Nova Gorica Contractor: CP d.d., Nova Gorica |
| Diameter | Advantages |
| DN 2400 mm | Leak tight, corrosion resistant, long service life, simple and fast installation |
| Pressure class | |
| PN 1 | |
| Stiffness class | |
| SN 10000 N/m² | |
| Installation | |
| open trench | |
| Assembling time | |
| 5 hours | |

The strong seismic activities of the region that occur periodically called for a material and structure that would be able to absorb ground movements.

Fast Installation, Longevity and Extendable Capacity - HOBAS® Potable Water Tanks on the Rise in Europe

Rum, Hungary

Year of construction

2011

Capacity

2 x 50 m³

Pipe Specifics

PN 1, DN 2400

Client

VASIVÍZ ZRt.

Advantages

HOBAS Expert to counsel on site, fast installation – 4 hours, utility chamber hosts 4 heavy duty pumps

HOBAS has established itself as an international supplier of potable water systems in the early 1980s. GRP Water Reservoirs, in particular, enjoy increasing popularity with the growing need for safe and sustainable water supply. This comes as no surprise for every tank is produced exactly to the client's specifications and the practical prefabricated unit design guarantees comparably easy transportation and above all an impressively fast installation.

HOBAS Potable Water Tank Premiered in Hungary

Amongst the most recent projects counts a 100 m³ reservoir that has been installed in Rum, Hungary, at a water treatment facility filtering iron and manganese from raw water between the water wells and water tower. The required reservoir consists of two 50 m³ water chambers DN 2400 and a utility chamber hosting amongst other instruments 4 heavy duty pumps. An expert from HOBAS Czech Republic came to counsel and support at site to make sure the installation of this Hungarian GRP Tank premier is a complete success. After four hours only, the prefabricated and fully equipped units of the reservoir have been unloaded and assembled.

Two Recent Projects in Slovakia

To bridge shortages in potable water supply Slovakia has been falling back to HOBAS GRP Potable Water Tanks over and over again. The products' approved leak tightness, longevity and above all their quick and simple installation as well as the possibility to extend the capacity any time in future led to the recent construction of a 150 m³ capacity

GRP Water Reservoirs, like this one in Hungary, enjoy increasing popularity with the growing need for safe and sustainable water supply.



reservoir (consisting of one utility and two water chambers DN 2000) as part of the newly built municipal water supply line for Velká Čierna. Similar reasons and the national HOBAS track record brought also the investor and building company of the potable water project Prešov to set up a GRP Reservoir. The all in all 100 m³ capacity tank has been swiftly installed on a slope above the village Vysoká.

Fmd: hobas.hungary@hobas.com,
hobas.slovakia@hobas.com



Velká Čierna, Slovakia

Year of construction

2010

Designer

Bystrík Paňák

Capacity

2 x 75 m³

Pipe Specifics

PN 1, DN 2000, SN 5000

Client

Compact - Gas s r. o.

Constructor

Chirac Group Ltd

Advantages

**Easy installation,
long life, possibility of
extension**

Vysoká, Slovakia

Year of construction

2009

Designer

Stavoprojekt Prešov

Capacity

2 x 50 m³

Pipe Specifics

PN 1, DN 2000, SN 10000

Client

Chemkostav a.s.

Constructor

Vodip s.r.o.

Advantages

**Easy installation,
long life, possibility of
extension**

HOBAS® System Building Units

A Couple of Hours Assembly for up to 100 Years Service Life

With five to several hundred cubic meters capacity HOBAS Potable Water Tanks are suitable for small residential areas with only few households as well as for larger municipalities. Thanks to the modular design of the ex works prefabricated units HOBAS Potable Water Tanks are produced to perfectly match topographic conditions and client requirements. The units' comparably light weight facilitates transportation, speeds up installation and makes heavy equipment dispensable – they hence represent a perfect solution for areas which are difficult to access. The HOBAS Jointing System guarantees an easy and fast assembly resulting in a permanently tight construction. Once the tank bedding has been prepared it is only a matter of hours before the reservoir is ready for use.

A good example for simple transportation and record breaking assembly time is the project Reidlingberg in the market townships



Wang and Randegg in Lower Austria. The HOBAS Tank which holds up to 30 m³ is connected to a total of 18 estates of the area and supplies around 200 inhabitants with potable water.

A fast installation as well as low maintenance costs were also good reasons for Italian decision makers to opt for a HOBAS Potable Water Tank for a region in the Apennine Mountains. The 255 m³ capacity tank consists of a utility chamber and three 25-m-long water chambers DN 2400. The reservoir was completed faster than expected – within 12 hours!

Fmd: info@hobas.com



Třebíč, Czech Republic

Year of construction

2009

Capacity

2 x 125 m³

Pressure class

PN 1

Diameter

DN 2400

Stiffness class

SN 10000

Client

VAS Třebíč

Contractor

SYNER VHS Vysočina

High Quality in Form and Function in the Czech Republic

One would hardly suspect a HOBAS GRP Potable Water Tank under ones feet once it has been installed, covered and greened to suit its natural surroundings. The door to the utility chamber may be the only evidence and even this is often framed with natural stones to camouflage the structure. Not so in Czech Republic, where we find proof that necessity can be very well combined with art: The access to the utility chamber of a 250 m³ capacity HOBAS GRP Potable Water Reservoir received a piece of architectural art around it – an impressive metal pyramid. Assisted by HOBAS Experts and in considerably short time, the constructor set up the reservoir that is part of the new potable water system Čechtínsko supplying the north-west of the district Třebíč and which makes sure that potable water is available also during dry weather periods. Disturbances to the protected area could be minimized thanks to the well timed deliveries of HOBAS Czech Republic.

Fmd: hobas.czech@hobas.com



Did you know...

HOBAS gives safe and reliable water supply top priority and to ensure that **HOBAS Potable Water Systems** are certified by independent institutions. Despite diverse local specifications for potable water pipe systems we are proud to say that we are certified in many countries such as Germany, France, Italy, Croatia, Austria, Poland, Russia, Scandinavia, Czech Republic and the USA.

Fmd: info@hobas.com



Info

Also in 2011 the German Society for Trenchless Technology (GSTT) has awarded the most outstanding projects implemented with the help of trenchless technologies with their renowned prize. Stadtentwässerung Pforzheim (urban drainage Pforzheim) came first for their project "Inverted Siphon Enz" realized with a HOBAS Pipe System in which amongst other contractors SONNTAG was involved. The special prize for foreign projects went to the civil engineering office Tiefbauamt Basel-Stadt and the contractor Insituform for the rehabilitation of a sewer relief main with HOBAS NC Line Pipes. Congratulations!

Fmd: info@hobas.com

Our New Baby Giant

The first HOBAS GRP Pipe D_e 3600 saw the light of day on January 11th. In future, these large diameter pipes will serve for example as potable water reservoirs, storage tanks and in special applications such as pedestrian and bicycle underpasses. Congratulations and a big Thank You to the teams **HOBAS Poland**, **HOBAS Germany** and **HOBAS Engineering Austria**.

Fmd: info@hobas.com

