

Home HUBER Report RoDisc® Rotary Mesh Screen for a drinking water application

RoDisc® Rotary Mesh Screen for a drinking water application



RoDisc® Rotary Mesh Screen installed in the inlet structure from where a 10 km long pipeline runs to the water works



The inlet structure on the left, the spring overflow on the right

The Austrian municipalities Zell am See and Bruck an der Glocknerstraße operate a water supply facility together which is fed from a spring at 940 m above sea level. The minimum delivery of the spring is about 40 l/s. It lies in the Fuscher Valley near Salzburg in the Glockner mountain chain. The highest peak of the Glockner mountains and Austria's highest mountain is the Großglockner.

Directly after the well shaft the drinking water flows through an inverted syphon through the valley bottom to the inlet structure where it is filtered by a HUBER RoDisc® screen. The RoDisc® screen is equipped with 10 discs which are covered with a 18 µm stainless steel mesh. The screen is used for the first stage of water treatment and serves to protect downstream systems. It retains the minerals contained within the spring water, mainly small plates of mica schist which especially occur after storms and during the melting of snow in spring. The RoDisc® screen not only protects the turbine, it also improves the pollution prevention in the drinking water reservoir. The normal capacity of the water works is 370 MWh/a which is equivalent to the supply of about 85 households.

Initially, cylindrical reversible flow filters were planned to be used which are known from many drinking water applications. Due to the right information at the right time the customer's decision makers immediately recognised the benefits of the RoDisc® screen.

As no DVGW or ÖVGW test guidelines were available for this type of filters, the customer insisted to have the non-metallic materials tested for their suitability.

For the use of the RoDisc® screen in a drinking water application the non-metallic materials required the KTW certification and DVGW certification according to work sheet W270. The results of the tests according to the DVGW work sheet W270 confirmed that, in terms of microbiological aspects, the non-metallic materials tested are suitable to be used in drinking water applications. The KTW certification tests showed that the non-metallic materials used do not give off any substances to the drinking water and do not unacceptably affect the drinking water.

Two of the benefits the RoDisc® screen offers were the main reason why the customer decided to buy the HUBER product: First, the HUBER RoDisc® screen operates with a very low pressure difference of 10-15 cm WC. Second, HUBER does not use any adhesives in the manufacturing process.

Other advantages of the HUBER RoDisc® screen are its space-saving design and filtration by gravity due to the small pressure loss. The height difference between the water level upstream and downstream of the RoDisc® screen is the driving force in the filtration process. It is not necessary to lift or suck of water. The RoDisc® screen can easily be tailored to suit specific site requirements and minimises the requirements for structural measures. It is a simple, economical and efficient solution. Water works operators are therefore well advised to think about whether to use a HUBER RoDisc® screen to pretreat drinking water.

19 Apr 2024 03:51:09

- **Related Products:**
- HUBER Disc Filter RoDisc®
- Ultra Fine Screens
- Microscreens

Related Solutions:

Water Conditioning: HUBER Solution for Potable Water Generation from Surface Water



ROTAMAT Ltd. t/a HUBER Technology Units C&D Brunel Park Bumpers Farm Ind. Est. Chippenham Wiltshire SN14 6NQ Registered in England No. 2874696 VAT Registration No. 639396393 Telephone: 01249 765000 rotamat@huber.co.uk <u>www.huber.co.uk</u>

A member of the HUBER Group

