

## Full overview despite foam buildup

Thanks to Heartbeat Technology, the defoamer is automatically fed into the wastewater



Hans-Peter Salzmann



Aerial view of ARA Worblental

ARA Worblental operates the third largest wastewater treatment plant in the Canton of Bern. It is one of the 15 largest and most modern plants in Switzerland and is responsible for the main transport system and the treatment of the wastewater across the entire Worblental and Zollikofen regions.

“With the solution from Endress+Hauser, we can ensure early detection of the rise of foam in our centrate shaft, thus efficiently reducing its formation. Without Heartbeat Technology, we have to keep our pumps running at a constantly high level. This helps us conserve resources and reduce the risk of damage.”

Hans-Peter Salzmann  
Head of Operations  
ARA Worblental

**ARA Worblental is relying on state-of-the-art technology in its new sludge dewatering system. The centrate water, a byproduct of the dewatering process, has a strong tendency to foam, which can lead to overflowing. To date the foam has been monitored with two different level sensors. With Heartbeat Technology, the process can now be efficiently solved with just a single sensor.**

**Requirements** The centrate water produced by the dewatering process contains high levels of ammonium-nitrate. As a result, it can be fed into the wastewater only in doses and is thus buffered in a retention tank. This makes monitoring essential since the resulting foam in the media strongly impacts the process. There is also a risk of the foam rising out of the centrate water shaft and flooding the dewatering infrastructure - and worst case causing it to backup all the way to the decanter. To date, the level has been monitored with a pressure

sensor without continually checking the buildup of foam.

**The solution** The radar-based Micropilot FMR60 measures the fill level of the centrate water and is able to detect the development of foam with Heartbeat Technology. Thanks to the instrument's two power outputs, this can occur simultaneously. The second power output regulates the defoaming pumps in a stepless manner so that only so much is fed as is really necessary.

### Advantages of Heartbeat Technology

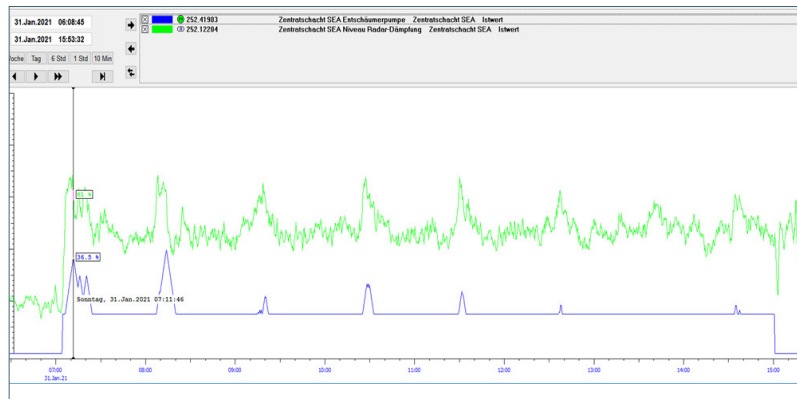
- Detects foam or buildup during the process
- Conserves resources
- Reduced maintenance
- Lower operations costs
- Higher system availability
- Commissioning wizard

 **Included in the delivery**

- Micropilot FMR60 with Heartbeat technology and a second power output
- Flexible sensor mounting bracket
- DeviceCare operating software, including wizard, at no cost



Micropilot FMR60 in the centrate water.



Dewatering process. With the basic configuration of the feeding pump set at 16%, the biggest fluctuations are eliminated. If there is additional foam buildup, the feeding pump increases the amount.