

AUSTRIAN UTILITY:

‘WE DIDN’T BELIEVE ENERGY SAVINGS OF THIS SIZE WERE POSSIBLE’



Christian Portschy stands with the Grundfos CR-95 pump for water boosting. Portschy is managing director of Wasserverband Südliches Burgenland (WWSB), the water utility of Southern Burgenland in Oberwart, Austria.

THE SITUATION

When he first saw the “small” size of the new pressure-boosting pump from Grundfos, Christian Portschy felt a bit sick with worry.

“I was very sceptical,” says Christian Portschy, managing director of Wasserverband Südliches Burgenland (WWSB), the water utility of Southern Burgenland in Oberwart.

“With this new type of pump, Grundfos helps us realise our vision of supplying water sustainably to the people in our area.”

– Christian Portschy, managing director, WWSB

WWSB had worked with Grundfos for many years – mainly in the submersible pumps area. Portschy heard that Grundfos was field-testing a new “extra-large” series of CR multistage pumps. WWSB could use these in its water booster supply application after sand filtration/backwash to lift the water into the storage tanks. And Grundfos suggested that the new CR could do the same work up to 30% more efficiency than the current brand of pumps in the application. Portschy was interested to try it.

But when he saw its small size, he had second thoughts. “I didn’t think the pump would be able to cope and deliver the necessary water pressure,” he says. WWSB’s top priority, he adds, is to ensure a safe, energy- and cost-efficient water supply to Oberwart’s 50,000 residents.

Could the CR-95 deliver?

THE SOLUTION AND OUTCOME

During commissioning in May 2017, the next uncertainties arose, Portschy says. The operators in the control room were in doubt: Are the power consumption readings correct? Is the small motor overloaded? Does the pump still run in its characteristic curve? Is it actually delivering 25 litres/second (l/s) – up to 8 l/s more than the big, old pumps? And was it actually working? It was not as loud...

It did not take long for the doubts to clear, however. First measures revealed that for every litre per second delivered, the new Grundfos CR-95 used 689 W – versus 895 W from the old pumps. Further evaluations showed a max savings potential of 30%.

“The pump clearly does its job,” Portschy says. “The readings have proven this huge savings in energy. We were quite surprised by the performance data.” WWSB plans to replace the other three older pumps on the boosting line with CR-95s in coming months.

“We’ve achieved huge energy savings with this one pump,” Christian Portschy says. He adds that the pump fits in to the utility’s own ambitions of sustainability – which include its own solar energy supply installed on building rooftops nearby. With these 200 PV panels and the new pump and lower energy consumption, WWSB can now run important equipment in case

[See video](#)



“With this new type of pump, Grundfos helps us realise our vision of supplying water sustainably to the people in our area,” says Christian Portschy, managing director, WWSB.

of a power blackout.

“Our goal for the future is to keep supplying water in a sustainable manner to the people in our area. I’m very proud that we have won a stage in our vision for the future, so that we can supply future generations with this precious liquid at any time.”

GRUNDFOS SUPPLIED

For the water booster supply application after sand filtration/backwash at Wasserverband Südliches Burgenland in Oberwart, Austria, Grundfos supplied a CR-95 22 kW model from its new line of “extra-large” series of CR multistage pumps.

[Read more about the CR here.](#)



Image: The Grundfos CR-95 multistage pump at WWSB in Oberwart, Austria. The pump was much smaller than the other, older pumps from a different brand in the boosting/filtration application. Could it deliver?



Image: “Our goal for the future is to keep supplying water in a sustainable manner to the people in our area,” says Christian Portschy, managing director of utility WWSB in Oberwart, Austria.