

WEDA robot removes sediment from 300 year old water reservoir

Early this year WEDA received the order from SITA France and on March 21-23 WEDA personnel operated the YT-800 reservoir cleaning system on site at the Syndicat des Eaux de Versailles (SEVESC) water treatment plant outside Paris, France.

The job is part of a project where WEDA will supply an underwater cleaning system for cleaning the 5 water reservoirs at the water treatment plant. The 5 basins are used for the storage of raw water and have a total surface of 44 000 m² and have not been cleaned for over 20 years. The sediment depth range from 10-40cm with heavy sea weed and algae growth.

The YT-800 machine that was used had been equipped with an algae cutting device and a big rotating auger for moving sediment and sea weed to the pump inlet. The machine proved to work very well in these very tough conditions and SITA is now considering purchasing the machine.

The SEVESC water treatment plant in Louveciennes produces 120 000m³ of drinking water per day using ozonation followed by activated carbon filters. The water comes from the river Seine and is first put through infiltrations basins before it is pumped to the raw water basins.

Over 2 years ago a project was initiated to renovate the basins and stop them from leaking. Several alternatives were studied, one of which is to cover the bottom and walls of the basins with a PVC liner. This option is much less expensive than redoing the concrete work.

Before the liner is put in the basins have to be cleaned. This is where WEDA's solutions for cleaning underwater proved to be a better and more cost-efficient solution than any competing method. Firstly, it is the only method where it is possible to clean without disturbing production. Also, it is the only viable solution for cleaning once the liner has been put in. With the WEDA solution SEVESC will be able to clean the bottom of the basins frequently before sediment grows to deep.

In this project WEDA's principal client is SITA (part of the SUEZ environment group) who is the main contractor for the cleaning part of the renovation project. The cleaning project also includes a mobile sludge treatment plant to which the sludge will be pumped.

SEVESC

SEVESC or Société des Eaux de Versailles et de Saint Cloud is a shared subsidiary between Générale des Eaux (Veolia Group) and Lyonnaise des Eaux (Suez/Ondeo group). SEVESC cares for the water production for 359 000 people in 20 municipalities in the Paris region and waste water treatment for 1,7 million.

SITA

SITA, together with Ondeo and Degrémont forms SUEZ ENVIRONNEMENT, a SUEZ business line. SUEZ ENVIRONNEMENT is one of the world's water and waste service sector leaders. SITA turnover is 5.55 billion euros and 64 million inhabitants benefit from SITA's waste management services worldwide.

WEDA

Weda is an industrial enterprise that offers solutions for cleaning underwater surfaces.

Water works, wastewater treatment plants, industry and commercial swimming pools rank among our customers. Our business is divided into three companies. **Weda Poolcleaner AB** designs, builds and sells pool cleaners for swimming pools and commercial swimming facilities with high demands on performance and reliability. **Weda Vatten AB** designs and develops underwater cleaning equipment for water works and wastewater treatment plants. **Weda Water Service AB** develops and markets Weda's VR-600 system for cleaning water tower and reservoirs.

The **YT-800** is an electricity-operated remote controlled submersible robot for cleaning large underwater surfaces. The sediment is pumped through a hose to a designated point of discharge, such as a sand treatment station.

Some key facts:

Dimensions (L x W x H): 1150 x 1200 x 900 mm.

Pump capacity: 100 m³/h.

Speed: Variable from 0.5 to 10 m/min.

Power consumption: 5.5 kW

Other: Rotating screw nozzle is vertically adjustable. Can be fitted with a video camera.

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