



better together

## CASE HISTORY

# Uniqa Chopper solves clogging problems in special waste facilities

### Situation

HASI S.r.l., a subsidiary of the HERAmbiente S.p.A. Group, operates in the collection, storage and purification of special liquid waste in a large area of Tuscany.

The facilities are located in the municipalities of Castelfranco di Sotto and S.Croce sull'Arno, near Pisa, and cover an area of more than 70,000 m<sup>2</sup>, 11,000 of which indoor.

The maximum treatment capacity is 270,000 tonnes/year, of which 70,000 tonnes/year of hazardous liquids.

The facility has various unloading areas for tanker trucks that dump into pits equipped with grids to remove bulky bodies through a system of flexible pipes with quick couplings.

There used to be problems of clogging during re-launching to the fine screening process due to solids of various types and sizes present in the discharged liquids that were only coarsely filtered in the sewage collection tanks.

Furthermore, the lifting of particularly heavy effluent from the tanker trucks due to the presence of sand and solids was also highly critical, to the extent of causing blockage of the pipes and the installed pumps, that needed to be removed from the tank and repaired every week.

### Solution

Given the particular nature of the liquid to be treated and the problems caused by the presence of solids of various shapes and sizes, Zenit technicians teamed up with local partner Elettromeccanica 2001 Zenit technicians to select and suggest the use of ZUG CP 100F 5.5/4 AW210 pumps with 5.5 kW UNIQA series premium-efficiency IE3 motors, chopper hydraulics with Ø210mm impeller and DN100 delivery.

After a trial run in the test department of the Modena plant, the customer evaluated the operation of the chopper system of these machines and gave the go-ahead for the supply of several units to replace the electric pumps installed until then.

### Benefits

The system has operated smoothly since May 2019 when the new Zenit UNIQA Choppers were put into service.

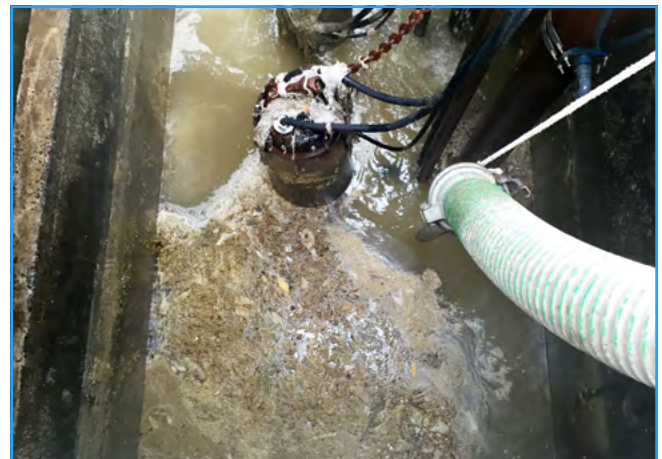
In particular, no blockage or clogging has occurred in the fine screening tank and consequently no cleaning was required.

On the other hand, in the tank for lifting residues from the tanker trucks, only one cleaning operation was carried out on the hydraulics, while in three other cases, due to particularly voluminous solids, it was only necessary to reset the thermal protection on the electrical panel.

The effectiveness of the cutting system and the efficiency of the motors of the UNIQA Chopper pumps have allowed the customer not only to limit maintenance activities, avoiding unwanted plant shutdowns and importantly to optimise energy consumption, significantly reducing operating costs.



The plant.



The ZUG CP installed.



ZUG Uniqa Chopper

<b>Customer</b>	HASI Srl - HERAmbiente Group				
<b>Company Profile</b>	Liquid waste disposal				
<b>Location</b>	S.Croce sull'Arno (Pisa)	<b>Country</b>	Italy	<b>Area</b>	Europe
<b>Application</b>	Wastewater lifting				
<b>Installed Products</b>	Uniqa ZUG CP 100F 5.5/4 AW210				
<b>Date</b>	May 2019				