Muffin Monster™ protects pumps and enhances productivity in biogas application

A biogas application facility in Catalonia, Spain, was experiencing serious problems with clogging pumps and pipelines. Operators had to dismantle the pumps and build them back together, a time-consuming and costly process.

The challenge
A biogas application facility in Catalonia, Spain, was experiencing problems with clogging pumps and pipelines. The facility relies on feedstock from local industrial (dewatered sludges) and agricultural (manure and slurry) sources to produce biogas, which is then used to generate electrical power. The customer found that the imported loads included many inorganic problem solids, including metal pieces, plastics, tools and ropes which caused significant problems for the inline chopper pump. The pump was replaced with a progressive cavity pump, but it didn’t completely solve the problem. The tough inorganic solids still caused undue wear and weekly maintenance issues, resulting in the first stator replacement after just six months of operation.

The solution
An inline 30K Muffin Monster became the right solution. Its dual cutter stacks are equipped with exceptionally sharp, stainless steel teeth, ideal for slicing through incredibly tough debris.

Customer benefit
Since incorporating the Muffin Monster, the system hasn’t experienced any downtime due to material clogging, and the maintenance crew was able to wait 19 months to replace the stator. By installing the PC pump with the Muffin Monster for protection, the customer gained operational hours due to reduced maintenance, spare parts savings, and also reduced downtime and failures in the plant. The grinder has extended the stator repair interval offering savings of approximately EUR 500 per stator change, and has further increased the maintenance and repair intervals to keep the plant operating at peak performance.

In a system where the feedstock can vary, the use of a grinder can help make a more homogenous waste stream providing operational and maintenance savings.

Andy Bruckshaw, Director of Sales at JWC Europe

The Sulzer difference
The 30K Muffin Monster protects PC pumps reducing maintenance costs and downtime.

Applicable markets
Biogas facilities

Applicable products
30K Muffin Monster

Contact
muffinmonster@sulzer.com