

BiOWiSH® Aqua FOG

BiOWiSH® Aqua FOG Helps Reduce Sludge Production in an Instant Noodle Processing Plant

Background

An instant noodle processing plant located in West Java Island with production capacity of 1000 ton/day of instant noodle approached BiOWiSH local partner CV Abatemen in Indonesia to solve problems associated with excess fat, oil, and grease (FOG) in their wastewater.

This plant generates approximately 200 m³/day of wastewater containing high levels of FOG. To treat this, the wastewater initially flows through a pre-treatment plant to separate the sludge from the water. The pre-treatment plant is comprised of 4 main units: Cooling tower, equalization tank, DAF, and sludge holding tank. The floating sludge from the sludge holding tank is pumped out twice a month. The water from this tank then flows to biological tank for further treatment.



Cooling Tower →



Equalization Tank ↓



Sludge Holding Tank



← DAF

BiOWiSH® Aqua FOG



- Rapidly reduces fats, oils, and grease
- Reduces sludge production and handling
- Increases plant capacity
- Reduces odors
- Reduces aeration requirements
- Reduces need for chemical additives
- Improves plant stability
- Reduces hydrogen sulfide, ammonia, and nitrates
- Pre-treats influent in collection systems
- Natural and non-toxic

Available Sizes

- 100g/3.5oz
- 1kg/2.2lbs
- 5kg/11lbs
- 10kg/22lbs

Objective

The objective of the study was to reduce the sludge at the sludge holding tank in the pre-treatment plant and enable effective treatment downstream.

Solution

To deal with high levels of FOG, 400 g of BiOWiSH® Aqua FOG was dissolved in 200 L of fresh water and drip dosed daily near the inlet of the DAF tank. The pH of 7 and temperature around 35-40°C in the DAF were ideal for BiOWiSH® dosing.

Results

Within 3 weeks of dosing BiOWiSH® Aqua FOG, significant reduction in thickness of the sludge was observed by the plant operator. The hard-floating sludge crust was degraded, making it easy to pump the sludge from the tank to the truck for disposal. After 2 months of continuously dosing BiOWiSH®, 74% reduction in the amount of sludge was observed. Before BiOWiSH® was implemented, 91 tons of sludge was removed every 2 months. After BiOWiSH® implementation, only 23.5 tons of sludge was removed in the same amount of time.



Point of Dosing BiOWiSH® Aqua FOG



Before BiOWiSH® Treatment



After BiOWiSH® Treatment

Conclusion

BiOWiSH® Aqua FOG successfully reduced sludge and delivered savings associated with sludge disposal. Continuous dosing will further allow the plant to lower operational costs while improving plant stability.

Contact Distributor in Indonesia



CV. Abatemen Karya Bersama

Tel: +6221-53162100

Email: sales.abatemen@gmail.com



BiOWiSH® is a registered trademark of BiOWiSH Technologies International, Inc.

Contact us:

wastewater@biowishtech.com

+1 312 572 6700

biowishtech.com

1506-01-EN