

# Oil Water Separator

## Star Autoco, Lørenskog, Norway

How an innovative Mercedes Benz dealership met stringent local wastewater oil concentration limits and cut demand for pump-outs in half



### **Problem**

Star Autoco, a Mercedes Benz dealership and auto-repair shop in Lørenskog, Norway was struggling to control the oil concentration levels in its Oil Water Separators. The current permitted level of oil concentration is 50 mg/l.

All Oil Water Separators in Norway are under strict control by local authorities. Twice a year, all facilities are checked and analyzed to determine oil concentration levels.

An analysis of Star Autoco's 6,000 liter Oil Water Separator conducted by Promitek As, a leading waste handling and treatment consulting firm in Norway, revealed an oil concentration level of 1,000 mg/l.

## **Objective**

Star Autoco was looking for an effective solution to meet the oil concentration upper limit set by local authorities. Various initiatives had been implemented, including changing cleaning chemicals to an alkalic product called AutoSafe 648 which in 2% dillution has a pH level of 11.8. With these initiatives Star Autoco was able to lower concentration levels to 290 mg/l – still way over the permitted level of 50 mg/l.

#### **The Solution**

Star Autoco approved a proposal by BiOWiSH Nordic to use *BiOWiSH*<sup>TM</sup> *FOG* to rapidly breakdown accumulated oils in their Oil Water Separator.

#### BiOWiSH™ Aqua FOG Benefits

- Reduces sludge production and handling
- Increases plant capacity by reducing contact time (capital avoidance)
- Eliminates odorous emissions
- Delivers substantial energy savings due to reduced aeration
- Minimizes need for chemical additives
- Stabilizes and improves plant treatment performance
- Lowers hydrogen sulphide, ammonia and nitrate levels
- Pre-treats influent in collection systems
- 100% natural and non-toxic

#### **Available Sizes**

- 100g/3.5oz
- 1kg/2.2lb



## **Implementation**

200 grams of *BiOWiSH*<sup>TM</sup>- *Aqua FOG* was mixed into 20 liters of water and left to activate for 15 minutes. The solution was then applied into the drainage system leading into the 6,000 liter Oil Water Separator. The exact same procedure was repeated two weeks later. No additional treatments followed the second treatment.

Three weeks after the first treatment, the tank was analyzed and the results revealed that oil concentration levels had dropped from a base reading of 290 mg/l to 24 mg/l.



An additional analysis was conducted ten weeks after the first treatment resulting in a 30 mg/l reading.

### **Summary of Results**

Analyzed	Oil Level
Base reading	290 mg/l
3 weeks after treatmemt	24 mg/l
10 weeks after treatment	30 mg/l

## **Benefits**

Since implementation, Star Autoco has consistently met the oil concentration standards set by local authorities. As a direct consequence of the treatment, the demand for pump outs have been reduced from twice a year to once a year

## **Recommended Dosing**

For Oil Water Separators up to 6,000 liters (1,500gal), mix 500g of *BiOWiSH™ Aqua FOG* in 20 liters or 5gal of water and leave for at least 15 minutes to allow for activation. Then apply the mixture into the channels leading up to the Oil Water Separator. Repeat treatment every 6 months.

"BiOWiSH™ Aqua FOG has dramatically reduced the level of environmentally-harmful oil polluted waste water from our production line to an absolute minimum without any substantial investments. In fact, our current oil concentration level is so much lower than the set limit, that we could have let our waste water go straight out into the municipal sewage system".

— Mr Frode Aarsby, General Manager, Star Autoco AS

## **About BiOWiSH™ Aqua FOG**

The result of over 18 years of research and development, BiOWiSH™ is a powerful blend of biocatalysts that breaks down complex organic molecules to help eliminate waste, reduce odors, improve soil fertility and enhance water quality, among other uses. 100% natural and non-toxic, BiOWiSH™ is safe for everyday use in a wide range of consumer and industrial products. It has been proven to solve problems in environmental management (including wastewater, solid waste, soil and water remediation and industrial emissions), as well as agriculture. BiOWiSH™ products are used extensively and available in Asia, Australia, Europe, North America and Latin America.

Developed specially for the Wastewater Treatment industry, *BiOWiSH™ Aqua FOG* improves the efficiency of aerobic wastewater treatment plants, dissolved air flotation units, commercial septic tanks, oil water separators and grease traps. *BiOWiSH™ Aqua FOG* is recommended for influent streams with a fat, oil and grease content greater than 100mg/liter.

#### **More Information**

#### **Star Autoco**

Solheimsveien 62 1473 Lørenskog, Norway Contact: Frode Aarsby Phone: +47 67 97 97 97

#### **Promitek AS**

Bachetomta næringspark Lierstranda 3400 LIER, Norway Contact: Åge Svendsen Phone: +47 32 83 74 40

#### **BiOWiSH Nordic**

PO BOX 381 2001 Lillestrøm, Norway Contact: Morten Kjølberg Phone: +47 41 55 00 26

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