

# **Acid dosing system DOSY-S**

for cleaning aeration systems



# DOSY-S system: our contribution to energy saving

## **Energetic and functional** optimization of the aeration system on wastewater treatment plants

#### **Application**

One of the largest power-consumers in a wastewater treatment plant is the compressed air generation to supply the aeration system. Its energy demand increases with increasing contamination of the aeration elements. It has been proven that the percentage increase in energy costs is directly related to the pressure resistance of the aeration elements. At the same time, the life expectancy of the components decreases. This can be prevented with a regular injection of acid. With ETL's mobile dosing system, the operator can inject acid directly into the aeration line. This leads to an improved bubble pattern, reduced pressure in the aeration system and up to 10% lower power consumption of the compressors.

#### **Function**

A membrane pump delivers the acid from the DOSY storage tank directly into the aerator line. Here, the acid is finely atomized by a special spray lance. This ensures effective and uniform cleaning of the aeration elements. The effectiveness of the acid can be read off from the pressure drop on the integrated manometer. The acid reservoir can be conveniently filled with the additional pump (integrated in the system) and also emptied again for cleaning purposes.

#### **Industrial safety**

When designing the system, great importance was attached to maximum possible industrial safety. The user does not come into contact with the acid during either the filling or the dosing process. All components used are acid-resistant and the system complies with the WHG guidelines.

#### Acid

The dosing system is designed for use with up to 85% formic acid or up to 30% acetic acid. The use of the type of acid and the concentration of the acid must be agreed with the OEM specifications of the aeration elements.

The specific regulations for handling chemicals must be noted.









#### **Advantages**

- Lower power-costs of the compressors
- Uniform bubble pattern
- Cleaned nozzle
- Ultrafine atomization acid by a special spray lance
- Quick and effective cleaning

#### Technical data

- Power supply: 230 V / 50 Hz or 110 V / 50 Hz
- Dosing pump capacity: 8 L / h at 10 bar back pressure
- Filling pump capacity: 30 L / min
- Storage capacity: 35 L or 60 L

- Contactless filling and re-filling device
- Work saftey compliant
- Mobile use
- Gentle operation of the aeration system
- Easy handling
- Mechanical transfer point outside diameter ½
- DOSY-S S35: 550 x 475 x 930 mm (L x W x H)
- DOSY-S S60: 720 x 576 x 1,067 mm (L x W x H)
- Empty weight: 21 kg (DOSY-S S35), 25 kg (DOSY-S S60)

#### **Sectional view**



#### **Filling pump**



### Manometer digital



### **Special spray lance**



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