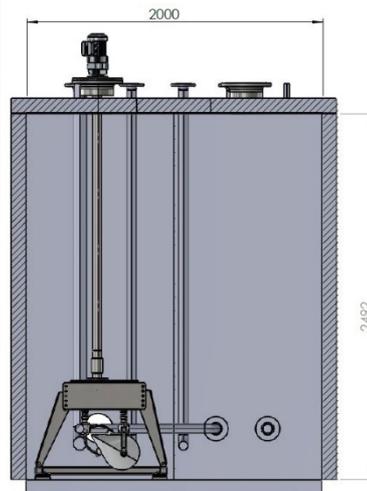


Homogenise storage tank

Detergent producer, Deggenhausen, Germany

Gentle homogenization



Sonett GmbH, Deggenhausen
Producer of detergents and
cleaners
www.sonett.eu

Operation

Storage tank (42 m³) for Vegetable surfactants with OLOID Type 400 I/S/T and extended drive shaft

Period

Since Nov. 2016

Success

No foam formation with complete homogenisation
Energy savings - planned connection capacity reduced from 2.2 to 0.25 kW
Operation possible down to lowest levels

Objective:

Energy-efficient, gentle homogenization of the surfactant (viscosity 100 mPa*s at 20 °C) in a rectangular storage tank, prevent foam formation at all filling levels, maximize the capacity of the storage tank.

Description of the tank:

The storage tank with the dimensions (L x W x H: 9 x 2 x 2.5 m) has a max. filling volume of 42 m³. After preliminary experiments with an OLOID Type 40 in an aquarium, the need for a baffle in the centre of the tank for complete homogenization even with low filling levels with only one device became clear.

Results:

The OLOID Type 400 with extended drive shaft, designed as a cardan shaft with protective tube (gear unit, agitator and all parts in contact with the medium made of 1.4571 stainless steel) can also be used in this viscous medium and at temperatures of approx. 30 °C for complete homogenisation.

Thanks to the OLOID installed on the ground, operation of the storage tank is also possible at low filling levels and thus the delivery times can be extended.

Due to the low shear forces of the OLOID, the surfactant is gently circulated and foam formation by the surface-active medium is prevented.

Two beater agitators with a connection capacity of 1.1 kW each were planned, but the OLOID managed this task with 0.25 kW and thus also reduced the operating costs through energy saving.