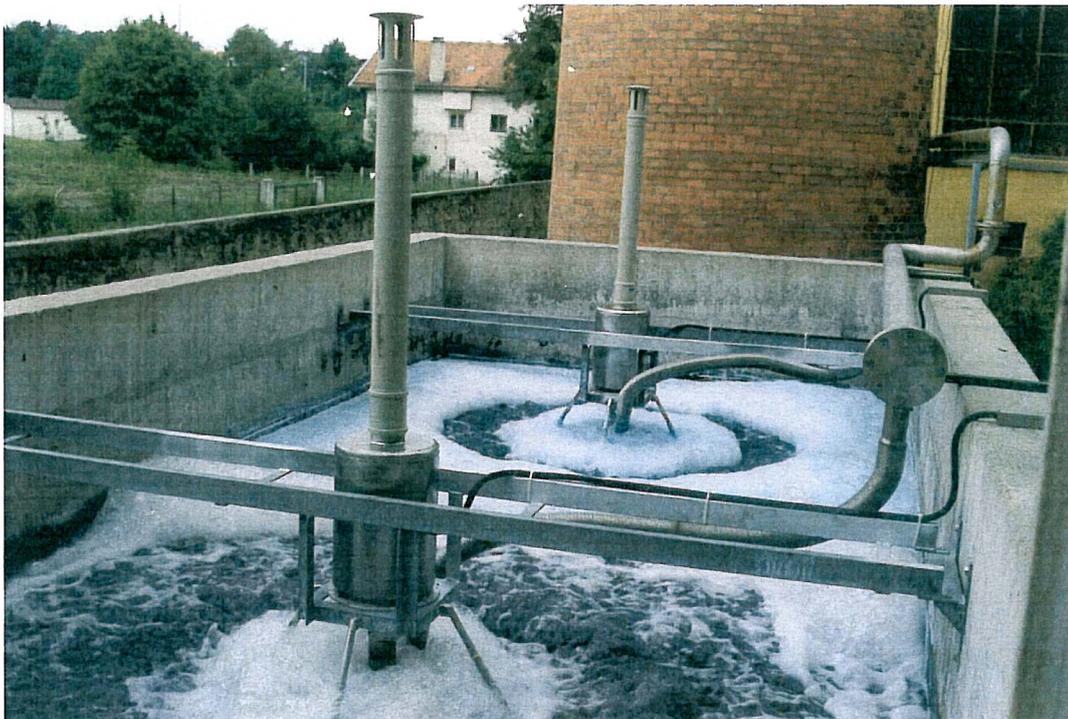


FUCHS CENTROX-Aerator for flue gas **type CX-G**



General

The FUCHS CENTROX-Aerator for flue gas - type CX-G - has been developed for the neutralization of alkaline wastewater. It aspirates the necessary flue gas directly and introduces it in form of fine bubbles into the wastewater. An additional blower is only needed, if the distance between the chimney and the neutralization basin is more than 50 m.

It also provides for the circulation and thorough mixing of the wastewater in the neutralization basin.

Due to appropriate design and good workmanship it is a sturdy, reliable and almost maintenance-free machine.

- 2 -

Description

The CENTROX-Aerator essentially consists of a vertically mounted TEFC-motor with drip cover, base plate, drive shaft, suction pipe with gas intake, diffuser and an impeller with curved blades at the immersed part.

Method of operation

The rotating impeller draws the liquid from underneath and the gas through the suction pipe from above. It swirls gas and liquid and centrifuges the mixture along the diffuser outwards.

The aeration takes place with fine bubbles and high carbon dioxide utilization. Thus problems with sprayed water, cooling-off during wintertime and odours are avoided.

Design and materials

The design of the CENTROX-Aerator is simple and sturdy without bearings and seals in the immersed part. The unit needs little maintenance and is almost free from wear. It is manufactured from corrosion-resistant materials. The drive shaft, the suction pipe, the impeller, the diffuser and the base plate are made of stainless steel.

The drive units are highly efficient electric motors with hollow shaft. They are equipped with adequately sized, permanently lubricated grooved ball bearings. The motor housings are either aluminium or high-quality cast iron. In our factory they are given an additional coat of protective paint.

The insertion end of the stainless steel shaft is fixed in the hollow shaft of the electric motor. Here it is precision-guided and can be easily mounted or removed. The drive shaft is balanced together with the impeller, which has been designed in full accordance to the most up-to-date technology. Thus, soft operation is obtained. Each FUCHS CENTROX-Aerator is tested in our basin before delivery.



CENTROX-Aerator - type CX-G – for
an horizontal closed tank

Installation

The CENTROX-Aerator for flue gas is arranged in the centre of the neutralization basin.

In closed tanks the unit is mounted with its base plate on a hatchway. In basins with constant level they can be mounted with brackets to a catwalk. Otherwise the aerator has to be installed on a flotation.



CENTROX-Aerator – type CX-G – on flotation in our test tank

Flotation

The flotation for the CENTROX-Aerator essentially consists of a framework with flotation tanks, supports and mounting fittings.

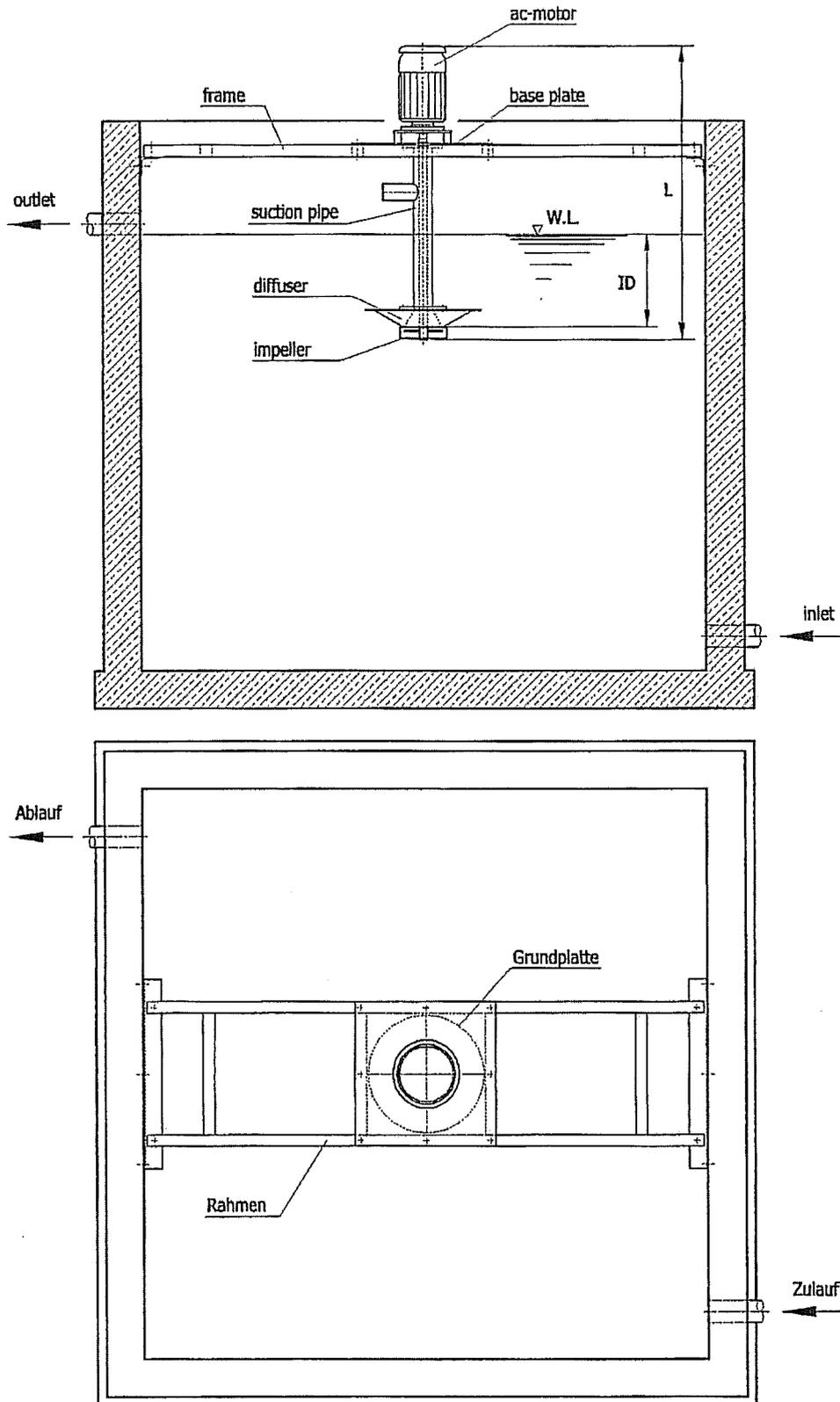
The frame is a hot-dip galvanized, welded steel construction. Optionally and against extra charge an additional powder-coating is available.

The flotation tanks are made of LDPE. They are resistant against mechanical impact and UV radiation. Optionally and against extra charge flotation tanks made of GRP and filled with polyurethane foam are available.

Supports, small parts and screws are made of stainless steel. The supports allow placing the CENTROX-Aerator - type CX-G - on the bank or on the bottom of the basin without any risk for the impeller and the drive-shaft.

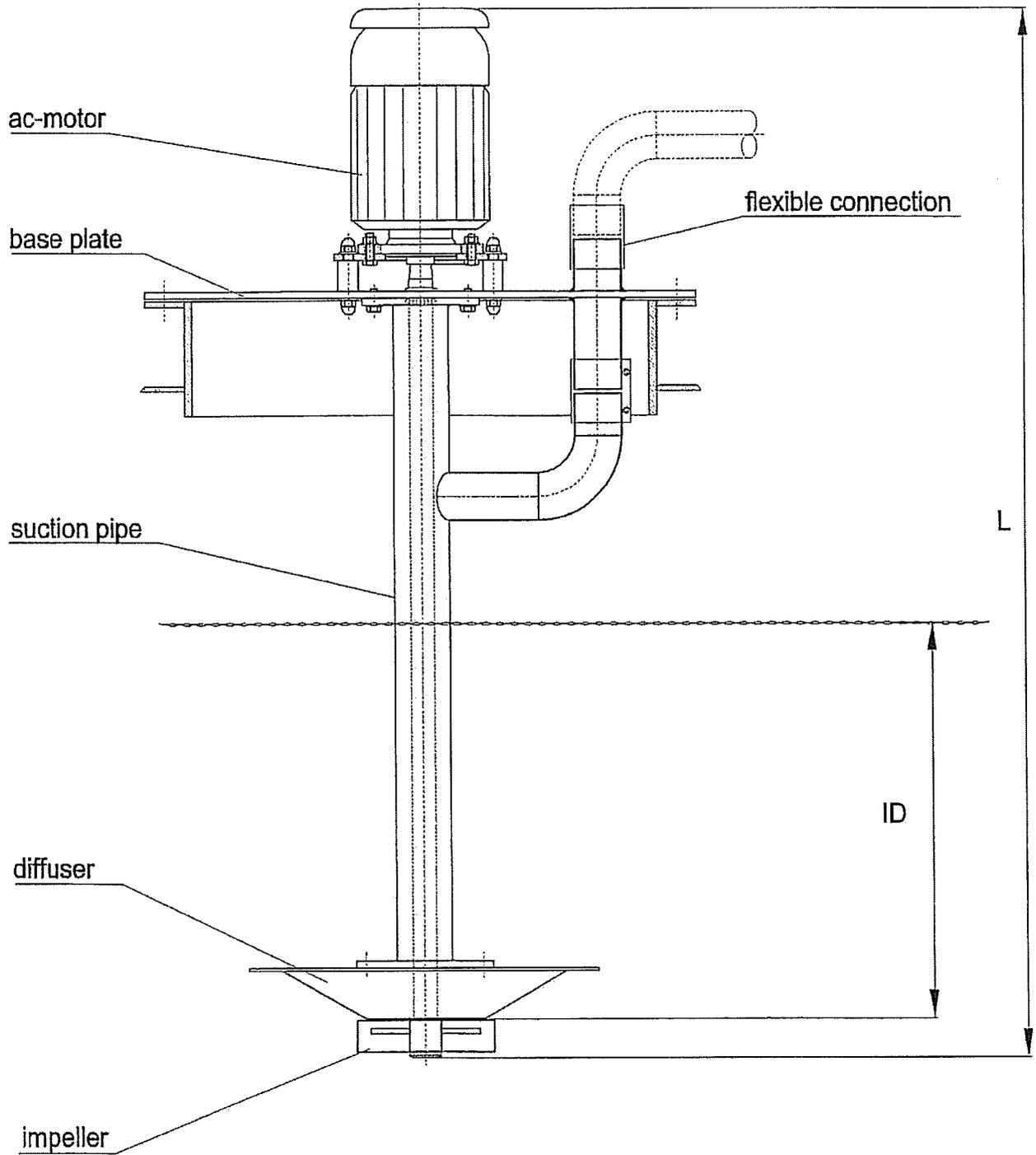
CENTROX-Aerator for flue gas

Installation in an open basin



CENTROX - Aerator for flue gas

Installation in a closed tank



CENTROX - Aerator for flue gas

Installation in a pond

