SOLVOX®-B

Transferring pure oxygen through diffuser hoses

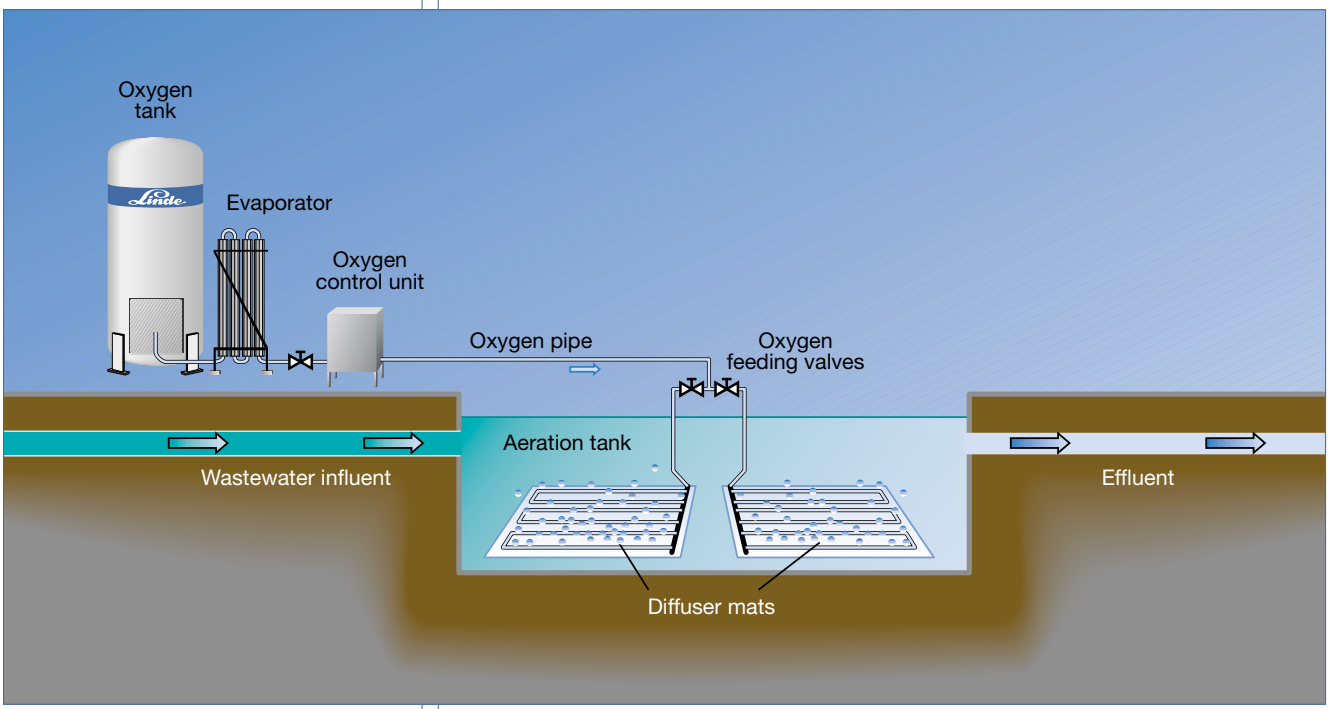
In the Linde **SOLVOX®-B** process, oxygen is transferred into the water through perforated diffuser hoses in the form of very fine bubbles – without the need for an external energy supply. This yields cost advantages in particular for medium-deep to deep tanks.

The Linde diffuser hoses for which a patent application has been filed, are made of flexible, chemical resistant polymer. Their mechanical stability has been enhanced by a fabric support. The fine perforations are produced by a standardised manufacturing process applying special needles. Mounted on frames, the diffuser hoses are placed on the bottom of the tank.

When oxygen is supplied, the pores of the diffuser hoses open, producing extremely fine gas bubbles that ensure optimum oxygen utilisation. If no oxygen is required, the pores close – preventing ingress of water and dirt particles.

The oxygen transfer rate basically depends on:
- Water depth
- Specific oxygen flow
- Water components

More than a hundred customers are already enjoying the advantages of the **SOLVOX®-B** process.



Advantages:

- Low investment costs
- No external energy supply required
- Oxygen transfer rate readily adjustable over a wide range
- Fast and easy installation, even in filled tanks
- Easily adaptable to any tank shape
- High oxygen utilisation in medium-deep to deep water
- No clogging of pores, not even after long periods of non-operation
- Maintenance-free
- Silent, environmentally friendly operation

Fields of application:

Wastewater treatment:

- Covering peak oxygen demand in overloaded aeration tanks
- Conversion of wastewater treatment plants to nitrogen elimination
- Odour control in large mixing and equalisation tanks
- Emergency oxygen supply in case of aeration breakdown
- Temporary oxygen supply during rebuilding of plants

Surface waters:

- Specific oxygen transfer into organically polluted ponds and running waters

Fishfarming:

- Oxygen transfer into influent channels
- Emergency oxygen supply

Technical data:

SOLVOX®-B diffuser hose

Hose material	EPDM
Outer diameter [mm]	27
Operating pressure, max. [bar]	10
Perforations [1/m]	1000 - 3000

SOLVOX®-B standard diffuser mats

Oxygen transfer capacity in clean water OC *	[kg/h]	5 – 10	10 – 20	15 – 30
Length of diffuser hose	[m]	20	40	60
Dimensions of diffuser mat LxW	[mm]	4000 x 1000	5000 x 2200	5000 x 2200
Weight	[kg]	35	60	70

*) Figures refer to a water depth of 5 m.

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Printed information on all Linde products and services is available from our sales offices.

Our specialist staff are on call to advise you.