

LIFTAIR is an inline, vertical mixing system with pneumatic (air) agitation. It allows mixing of liquids with controlled gas transfer (O<sub>2</sub>, CO<sub>2</sub>, CH<sub>4</sub>, CS<sub>2</sub>, N<sub>2</sub>...) and simple air volume regulation

## Principle

Air/Gas is introduced at a point close to the bottom of the LIFTAIR inducing a fast-rising current passing through the conical pipe. The paraboloid intake and the internal guiding flaps cause a squirrel-type vertical flow. Intensive mixing is carried down to the floor clearing it from deposits.

## Usage

Low to medium intensity mixing of geometrically unequal tanks and tanks with different or varying liquid levels. Specifically for flocculation, abrasive liquids, scaling or fouling liquids and gas-transfer (O<sub>2</sub>) or gas-stripping (CO<sub>2</sub>, CH<sub>4</sub>, CS<sub>2</sub>, N<sub>2</sub>...), A-SBR

## Typical applications:

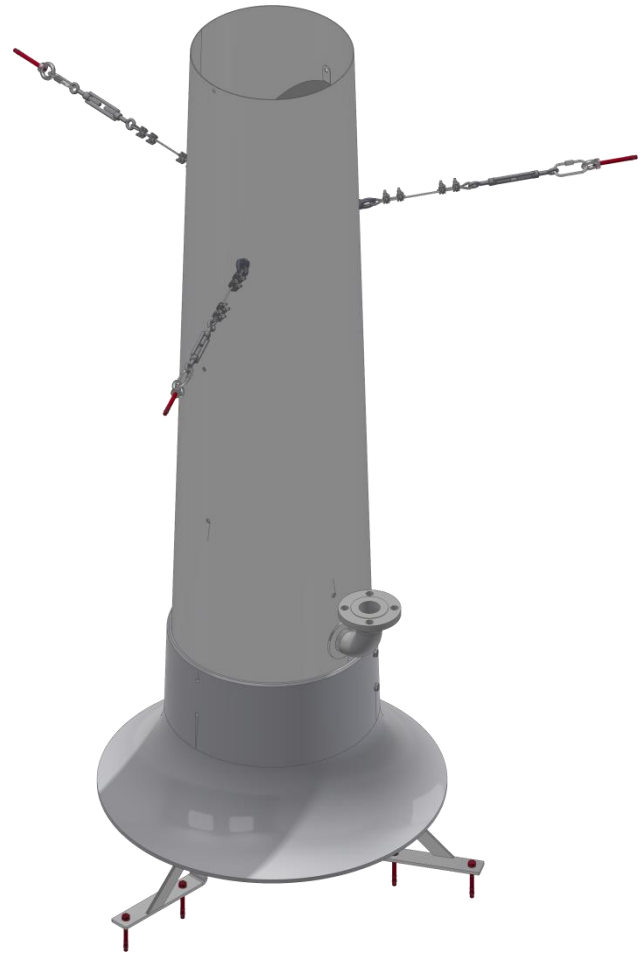
- Precipitation and Flocculation
- Oxidic /anoxic selectors
- Ex-Zones
- Gas-transfer and stripping

## Types

LIFTAIR can come for fixed bottom mounting or retrievable. Tank depths of up to 7m can be mixed with internal side wall clearance of >1.000 mm.

## Manufactured

Stainless steel and high grade epoxy FRP for up to 60 °C and pH ranges between 2 to 12. Various quality levels are available ranging from 1.4301, 1.4404 to AISI 316L.



## Technical data

|                  | unit                 | range        |
|------------------|----------------------|--------------|
| Air flow         | Nm <sup>3</sup> /h   | 5-300        |
| pressure drop    | mbar                 | 20-50        |
| Temp             | °C                   | <60          |
| TSS              | g/l                  | <10          |
| mixing intensity | W/m <sup>3</sup>     | 0,05 - 160   |
| air pressure     | mbar                 | 900          |
| pH-value         | -                    | 2-12         |
| mixed volume     | m <sup>3</sup> /unit | 2,5 - 360    |
| water level      | mm                   | 2.500-10.000 |
| LIFTAIR height   | mm                   | 2.000-4.000  |

## Material

|                              |  |
|------------------------------|--|
| Conical Shaft pipe and studs | 1.4301/1.4401/<br>1.4571/304L/316L       |
| Bolts                        | M8 / DIN 933                             |
| Floor Anchors                | HUS - Hilti                              |
| Air connection               | DN 50                                    |
| Air pipe                     | <DN 65                                   |
| Intake funnel                | FRP-Moulded                              |
| Side wall                    | SS ropes                                 |
| Connection                   |  |
| SS processing                | WIG MAG Welded / Tank immersion pickling |