

# ROTATION AERATION OF LIQUIDS

SUPERFINE DISTRIBUTED GAS BUBBLES



**MADE IN  
GERMANY**

**CERAMIC  
MEMBRANE  
DISCS**

# CERAMIC MEMBRANE DISCS

## ROTATION AERATION

### Benefits

- ◆ Direct gas input
- ◆ Energy efficient diffusion
- ◆ Enhanced shear forces through rotation
- ◆ Very small bubbles (40-60 µm possible)

### Applications

- ◆ Flotation
- ◆ Ozonation
- ◆ Oxygenation

### Applications

#### ■ Flotation

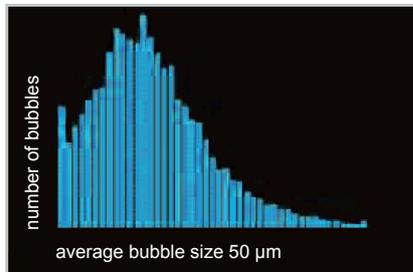
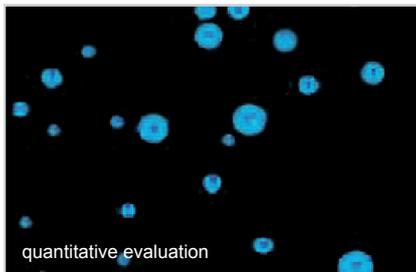
The efficiency of flotation processes is clearly increased by the application of Kerafol discs. The superfine distributed gas bubbles lead to an accelerated aggregate formation of dispersed particles and thus to a more effective separation. The gas bubbles are created directly in the medium at the membrane surface (no dissolved air flotation).

#### ■ Ozonation

By use of micro ceramic membranes ozone can be inserted the most effectively into liquids. The extremely fine distributed gas bubbles remain in the liquid for a very long time (minimised ozone losses).

#### ■ Oxygenation

In combination with oxygen there are a lot of advantages in applications with fish farming and aquaria.



### Principle

The inside of the membrane disc is applied with pressure through a channel structure. Gas flows through the micro porous material. Thus superfine distributed gas bubbles are created on the membrane surface. The discs can be arranged vertically, because there is no coagulation of the bubbles.



Technical Data	Membrane Disc 152	Membrane Disc 312
øa	152 mm	312 mm
øi	25.5 mm	91 mm
Thickness d	4.5 mm	5.85 mm
Membrane surface	360 cm <sup>2</sup>	0.14 m <sup>2</sup>
Pore size	2.0 µm	2.0 µm
Material	Al <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>
Bubble point air/H <sub>2</sub> O	1.9 ± 0.1 bar	1.9 ± 0.1 bar
Maximum operating pressure	3.0 bar	3.0 bar
Gases	O <sub>2</sub> / O <sub>3</sub> / CO <sub>2</sub> / N <sub>2</sub> / air ...	

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