

COMPARISON SHEET PLATE VS. DISC DIFFUSER

OXYFLEX® MF1100



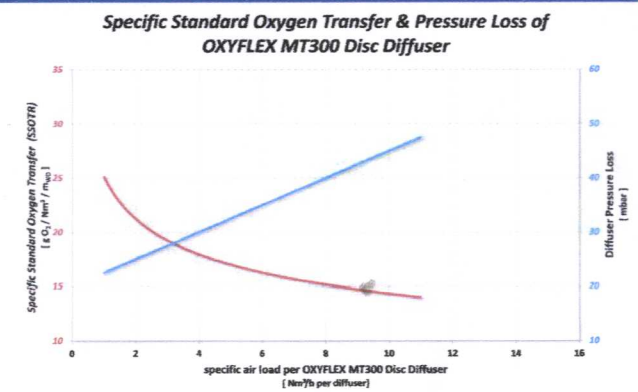
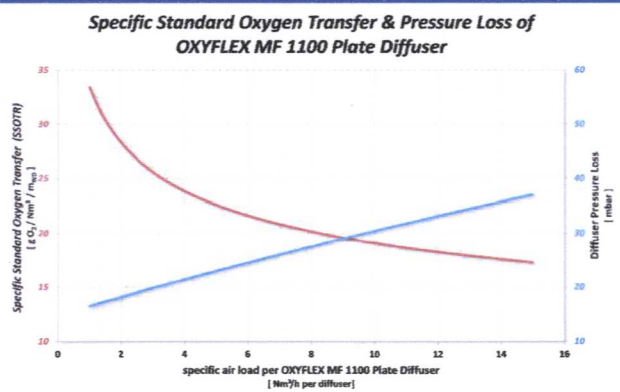
OXYFLEX® MT300/12"



Efficiency & Pressure Loss Plate Type Disc Type

OXYFLEX® plate diffuser realizes higher oxygen transfer rate and lower pressure loss compared to any disc diffuser.

(Values cannot be directly transferred to other systems – they vary dependent on numerous boundary conditions. We gladly prepare technical datasheets for any case upon request)



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02-2015

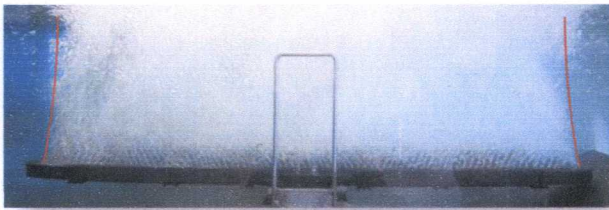
For more Information please visit us @ www.oxyflex.de

Bubble Pattern

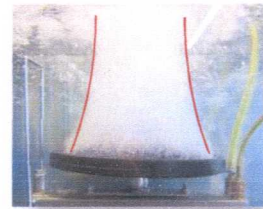
Plate Type

Disc Type

Minimizing of the „Candle Flame Effect“ with Plate Diffusers.



Better saturation caused by minimized constriction of ascending bubbles, resulting in higher oxygen transfer efficiency.



Constriction of the ascending bubble flow

Active Working Area

Plate Type

Disc Type

OXYFLEX® MF1100 has 300% of active area compared to 12" - even 500% of gassing area compared to 9" disc diffuser.

OXYFELX® MF1100



The special shape of the active working area ensures:

- ✓ low specific load of membrane
- ✓ good oxygen entry
- ✓ low opening pressure
- ✓ low pressure loss over the whole life time

12" disc diffuser



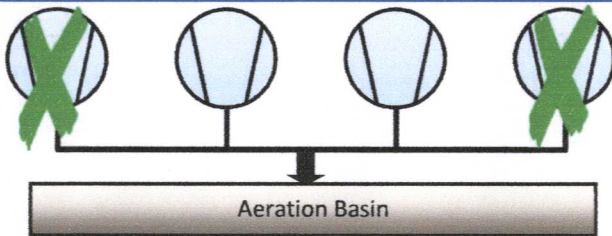
9" disc diffuser



Air Savings

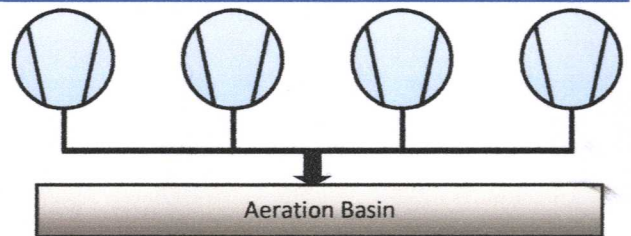
Air savings up to 40% caused by energetic optimized aeration help to reduce investment cost for blower capacity and operation costs significantly.

Plate Type



Higher oxygen transfer efficiency, helps to reduce required air amount, i.e. savings in invest- and operation costs are possible!

Disc Type

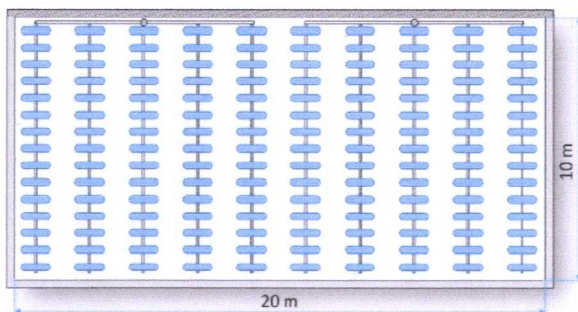


Pipe Savings

The special shape of plate diffuser results in pipe savings and less installation work for reaching same diffuser densities. These savings can compensate the higher cost for plate diffuser type. Even higher diffuser density, i.e. higher oxygen transfer is possible with plate diffusers.

Plate Type

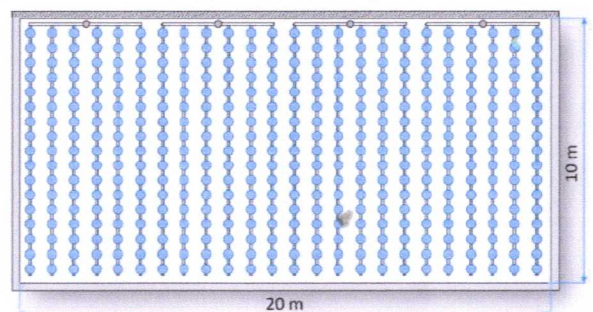
150 pcs MF1100 / density 15%



Grid needs around 106 pipe meters with OXYFLEX® MF1100

Disc Type

408 pcs 12" disc / density 14,3%



Grid needs around 233 pipe meters with 12" disc

Lifetime	Plate Type	Disc Type
Usage of high grade materials warrants long working life.	Estimated lifetime of OXYFELX® MF-type is more than 15 years for municipal sewage water. Installations are running successfully for more than 15 years without exchange of diffuser, as a result of special large flat active membrane shape.	Estimated lifetime of OXYFELX® MT-Type is around 6-8 years for municipal sewage.

Supratec



We Activate Sewage Water!