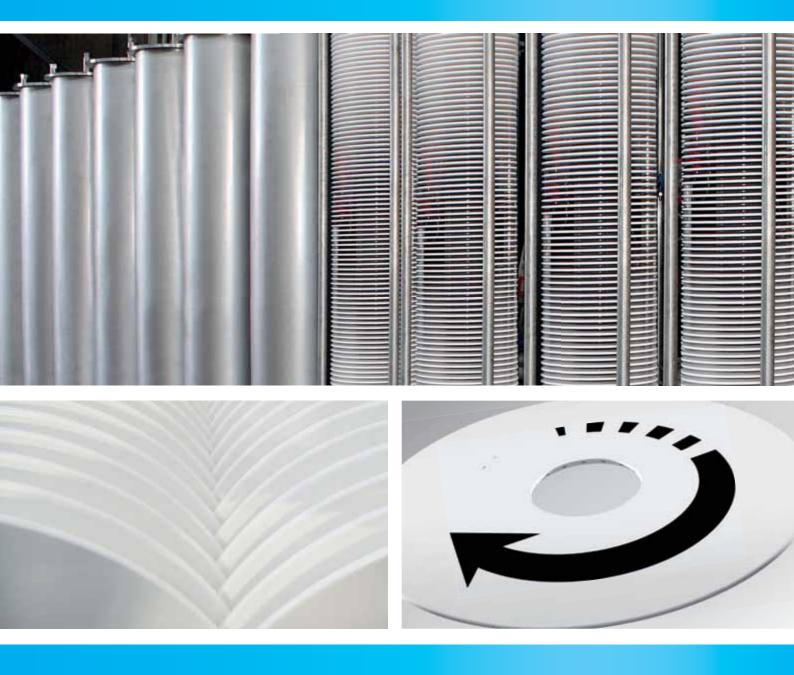


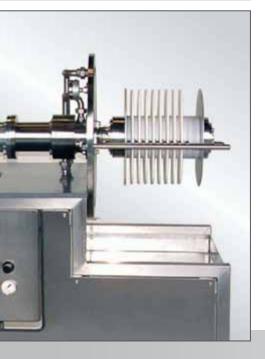
CERAMIC MEMBRANE DISCS Rotation Filtration

Dynamic Cross Flow Filtration









Rotation Filtration with Ceramic Filter Discs

Why Rotation Filtration?

- Extreme cross flow velocity
 (High efficient cleaning of the filter surface)
- Very low energy consumption (Compared to conventional cross flow techniques)



Rotation Filtration (Dynamic Cross Flow Filtration)

 The cross flow effect (tangentially flow cleaning of the filter surface) is generated by the rotating of the filter discs and not by pumping of large volumes.

Why Ceramic Filter Discs?

- Resistance to chemical and thermal stresses
- High filtration flux and very long service life
- Regeneration by backflushing or hot steam sterilisation



Ceramic Filter Disc 374 mm, 312 mm and 152 mm, Microfiltration and Ultrafiltration

Optimal filter geometry for the plant engineering

First Steps for Engineering Companies

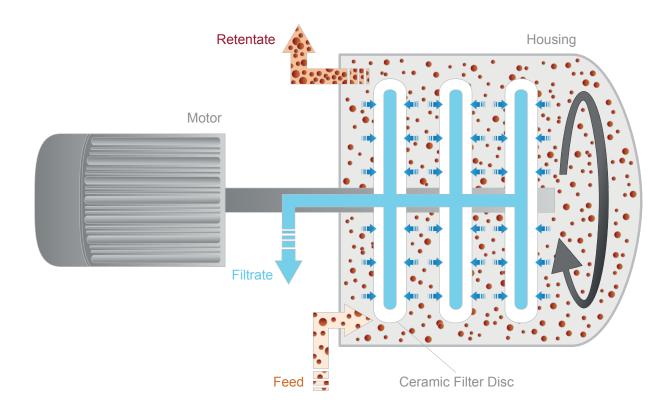
Kerafol is an independent filter producer and provides you with the parameters for installation of the Ceramic Filter Discs in your filtration units (sealing, fixing, process parameters). You can rent:

✓ Test Filtration Plants for Piloting

 An excellent choice for project planning of large filtration units (e.g. 100m² filter surface)

Diagramm of a Rotation Filtration Plant

Rotating Ceramic Filter Discs are assembled in a pressurised housing. The design of the discs shows drainage channels in the inside. The filtrate is transported from the outside to the inside of the discs. The rotation of the discs generates shear forces on the membrane surface. With this technique an increase of a filter cake is avoided resulting in a high filtration flux.



Main Parameters

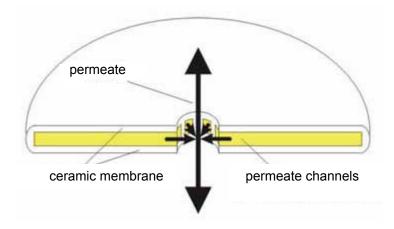
- Rotation Speed (rotating Ceramic Filter Discs)
- Transmembrane Pressure TMP (pressurised housing)
- Solid Content (concentration of liquids due to the removal of filtrate)



Rotation Filtration Modul with Ceramic Filter Discs: Membrane Surface 35 m²

Technical Data





Ceramic Filter Disc 374

- Diameter Øo 374 mm / Øi 91 mm
- Thickness d = 6,0 mm
- Membrane surface 0,20 m²

Ceramic Filter Disc 312

- Diameter Øo 312 mm / Øi 91 mm
- Thickness d = 6,0 mm
- Membrane surface 0,14 m²

Ceramic Filter Disc 152

- Diameter Øo 152 mm / Øi 25,5 mm
- Thickness d = 4,5 mm
- Membrane surface 360 cm²
- Filtration from outside to inside
- Support: pore size 2,0 μm
- Support: coating with layers of lower pore size (micro and ultra filtrartion)
- Chemical and thermal resistance
- Backflushing

KERAFIL Ceramic Filters	Micro Filtration			Ultra Filtration				
Mean Pore Size	2,0 µm	0,5 µm	0,2 µm	80 nm	60 nm	30 nm	7 nm	5 nm
Material	Al ₂ O ₃	Al_2O_3	Al_2O_3	Al_2O_3	ZrO ₂	TiO ₂	MgAl ₂ O ₄	TiO ₂

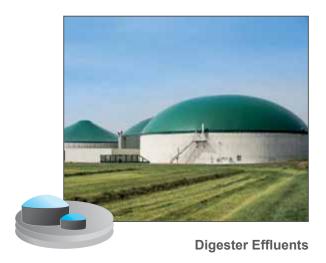
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... in fact in all areas fo solid/liquid filtration.

Applications Examples.



www.kerafol.com





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