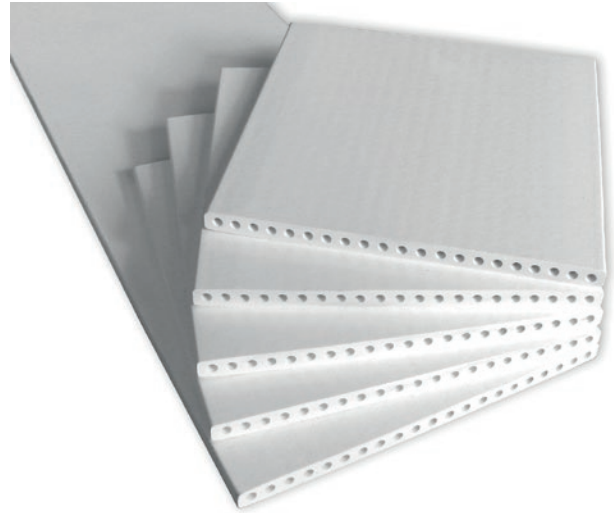


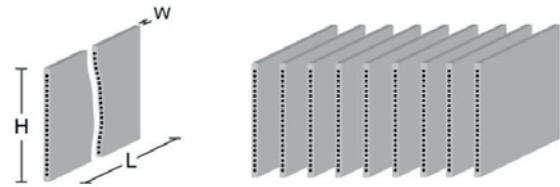
# Ceramic Flat Membrane

- CFM Systems® (Ceramic Flat Membrane) combines the advantages of an asymmetric inorganic filter and submerged flat membrane filtration.
- The advanced design enables an unprecedented technical and economical water treatment in different fields of application.



| Fields of Application                          | Drinking Water   |   |   | Sewage                                      |
|--|--|---|---|---|
|  | Ground Water   | Surface Water                               | Sea Water                                   | Municipal                                   |
| Core Treatment Targets                         | Removal of inorganic oxidized and adsorbed compounds                                   | Removal of suspended solids, micro-organism | Removal of suspended solids, micro-organism | Removal of suspended solids, micro-organism |
| Membrane Structure                             | Asymmetric design  |   |   |   |
| Material of Membrane                           | $\alpha\text{-Al}_2\text{O}_3$   |   |   |   |
| Filter Active Layer                            | InOxi (Fe/Mn)<br>InOxi-Ads (Ra)  | Org-Rem<br>Org-Ads                          | Org-Rem<br>Org-Ads                          | BioSys                                      |
| Material of Filter Active Layer (Nano-coating) | $\alpha\text{-Al}_2\text{O}_3/\text{ZrO}_2$<br>(modified depending on removal targets) |   |   |   |
| Average Pore Size [nm]                         | 200 (other sizes on request)   |   |   |   |

|   |      |
|---|------|
| Length L [mm]                                 | 530  |
| Width W [mm]                                  | 6.5  |
| Height H [mm]                                 | 110  |
| Inner Diameter of Filtered Water Channel [mm] | 3.0  |
| No. of Filtered Water Channels                | 21   |
| Filter Area per Plate [m <sup>2</sup> ]       | 0.12 |



| Fields of Application                  | Drinking Water |               |           | Sewage    |
|--|----------------|---------------|-----------|-----------|
|  | Ground Water   | Surface Water | Sea Water | Municipal |
| Max. Operating Pressure [bar]          | 2.5            | 2.5           | 4.0       | 1.5       |
| pH Range                               | 2-10           |               |           |           |
| Operating Temperature Range [°C]       | 20-60          | 5-40          | 5-35      | 5-35      |
| Permeability [l/m <sup>2</sup> *h*bar] | 7,500          | 5,000         | 6,000     | 2,000     |

