

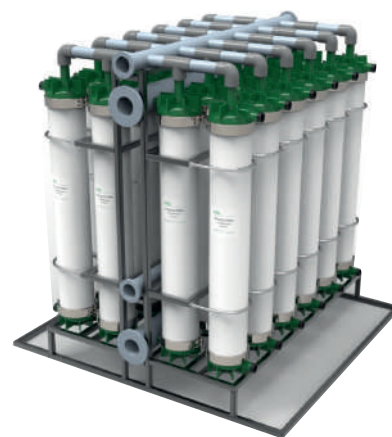
MANN + HUMMEL

Ultra Filtration Membranes

Description

Mann+Hummel Ultrafiltration (UF) modules are made from high strength, hollow fiber membranes that have excellent features and benefits:

- ▶ 0.02 μm nominal pore diameter for removal of bacteria, viruses, and particulates including colloids to protect downstream processes such as RO
- ▶ PVDF polymeric hollow fibers for high strength and chemical resistance allows long membrane life
- ▶ Hydrophilic PVDF fibers for easy cleaning and wettability that help maintain long term performance
- ▶ Outside In flow configuration for high tolerance to feed solids that help reduce the need for pretreatment processes
- ▶ U-PVC housing, helping to eliminate the need for costly pressure vessels



Features

- | | | |
|---|---|-------------------------------------|
| ▶ Low fouling | ▶ Low pressure operation | ▶ High flux, low pressure operation |
| ▶ High tolerance to chlorine, peroxide and other oxidants | ▶ Operational flexibility (Dead end flow) | ▶ Low energy consumption |
| ▶ Resistance to pH extremes | ▶ Innovative design | ▶ Simple cleaning |

Applications

- ▶ Drinking water treatment
- ▶ Pre-treatment to reverse osmosis and nano filtration
- ▶ Desalination pre-treatment
- ▶ Industrial process water treatment
- ▶ Municipal wastewater

MANN + HUMMEL

MBR Membrane Module

Description

The BIO-CEL® MBR series is ideal for biological wastewater treatment in industrial and municipal applications. BIO-CEL MBR combines the benefits of traditional hollow fiber and plate and frame configurations without any of their inherent disadvantages. The module has an extremely high packing density due to the thin and self-supporting membrane sheets, and the laminate offers a self-healing mechanism

- ▶ HIGH EFFLUENT QUALITY | 2 TIMES SMALLER FOOTPRINT
- ▶ SMART MODULE DESIGN | 360° ACCESS
- ▶ 5 TIMES LESS CLEANING | REDUCED CHEMICAL USAGE
- ▶ SELF-HEALING MEMBRANE LAMINATE
- ▶ FINE BUBBLE AERATION
- ▶ REMOTE ONLINE MONITORING WITH STREAMETRIC!

