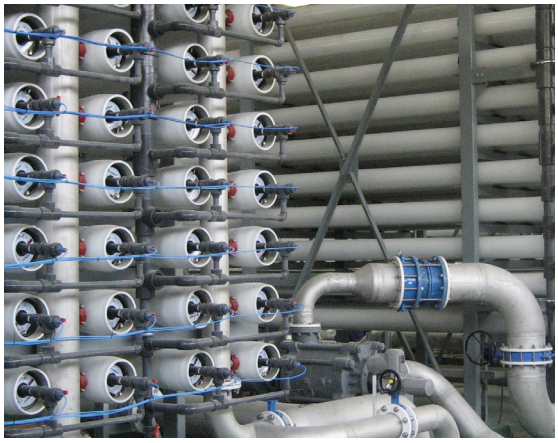
MANN+HUMMEL Water & Fluid Solutions

An Introduction

MANN+HUMMEL

Water & Wastewater

MANN+HUMMEL Water & Fluid Solutions (WFS) can help you solve your water and wastewater challenges with an array of products ranging from our technologically advanced membrane bioreactors (MBR) to our high rejection reverse osmosis (RO) elements - and much more!



REVERSE OSMOSIS

RO membranes are capable of rejecting over 99% of dissolved salts (ions), particles, organics, and more from the feed water.

The MICRODYN RO series of brackish water RO membranes is ideal for water purification applications including boiler feedwater, industrial process water, water re-use, and polishing effluent from MBR or UF. They are an ideal replacement option for standard solutions. OLTREMARE spirals are a complete line of small commercial elements and the perfect choice for customized solutions or private label requests.

MEMBRANE BIOREACTORS

Tighter discharge regulations, urbanization and increased water recycling efforts have made MBR the leading innovation in wastewater treatment compared to conventional activated sludge (CAS). Compared to CAS plants, BIO-CEL® MBR modules act as a physical barrier that enable the MBR to operate at up to 4x higher MLSS levels than secondary clarifiers. The resulting facility footprint could be half the size of a CAS plant.

- High Effluent Quality
- Simple Maintenance
- Less Cleaning Time
- Self-Healing Membrane Laminate

ULTRAFILTRATION

Ultrafiltration (UF) modules are used in treatment of water and wastewater in industrial and municipal applications, and MICRODYN-NADIR offers a comprehensive line of UF options to meet your needs.

Our most popular UF options include PureULTRA UF and AQUADYN® UF hollow fiber modules and *i*Sep™ 500 spiral modules. AQUADYN UF offers PAN membrane that is ideal for oily water treatment while PureULTRA is a PVDF membrane perfect for RO/NF pretreatment, surface water treatment, and tertiary wastewater treatment. Unique in the industry, *i*Sep 500 modules feature a vacuum-driven, backwashable, spiral-wound membrane design to handle high fouling water and wastewater streams.

Process & Specialty

From food and dairy to pharmaceutical and dialysis, we customize membrane products to meet your specific process requirements. We offer MF, UF, NF, and RO membranes, including TRISEP® spirals, innovative TurboClean® hard-shell sanitary spirals, net-wrapped spirals and tubular & capillary modules.

SANITARY SPIRAL-WOUND ELEMENTS

TurboClean® elements feature a rugged polypropylene shell that results in a stronger, more rigid, and durable element suited for the most challenging process applications, including processing dairy products, pharmaceutical products, beer and wine, proteins, and many other process streams.

TurboClean elements are available with all membrane types (RO, NF, UF, and MF). They are the strongest sanitary elements, maintain a longer operating life, and provide better performance, as well as offering the most effective cleaning and easiest installation. Other sanitary elements include our TRISEP® DS Elements for process and specialty applications.

FLAT SHEET MEMBRANES

MANN+HUMMEL WFS offers a full line of RO, NF, UF, and MF membranes for rolling spiral-wound membrane elements and for use in plate-and-frame devices. TRISEP® and NADIR® membranes are used in a wide variety of process separations, in addition to water purification.

NADIR® UP005 is a polyethersulfone (PES) membrane offering the highest protein rejection in the industry. NADIR® NP030 membrane is durable enough to be used in concentrated acid environments and caustic recovery systems with a pH range of 0-14. TRISEP® SBNF membranes are a cellulose acetate membrane well-suited for removal of organics and color.

TUBULAR & CAPILLARY MODULES

Our specialized tubular and capillary modules are available for a wide range of applications and are made to separate solids, suspended particles, and emulsified liquids, as well as create a high level of purification.

MICRODYN and SEPRODYN® modules provide well-defined flow conditions with high packing density and minimized dead zones. ULTRADYN™ hollow fiber UF modules are used in ultrapure water applications including high purity water polishing and water for injection. MAXIDYN™ tubular modules grant flexibility of treatment options and are a plug-and-play solution.

Who We Are

MEMBRANE SOLUTIONS FOR ALL YOUR WATER AND PROCESS NEEDS

THE WIDEST RANGE OF MEMBRANES

MANN+HUMMEL WFS is a global manufacturer delivering the membrane products to meet all your water and process needs. We offer the widest range of membrane products, including MF, UF, NF, and RO in flat sheet, spiral-wound, and hollow fiber configurations, as well as MBR technology for treatment of water and wastewater.

For more than 50 years, MANN+HUMMEL WFS has been producing high-quality membrane products used in industries across the world. We have locations around the globe, serving our customers from facilities in Europe, Asia, and the Americas. We have been a part of global filtration leader MANN+HUMMEL since 2015, operating as the water & fluid solutions business in the Life Sciences & Environment sector.

A SOLUTION AS UNIQUE AS YOUR COMPANY

MANN+HUMMEL WFS is the membrane industry's leader when it comes to manufacturing custom & specialty spiral-wound membrane elements. Our ability to provide a wide range of custom products allows our customers to order elements uniquely designed to suit their applications.

Whether it's new product development, made-to-order specialty construction, replacement of a discontinued membrane element, or a custom product built specifically for your needs, MANN+HUMMEL WFS can provide a solution. Ask us about our capabilities!

- Private Label
- High Temperature
- Direct Replacements
- Ultra-High Pressure

EUROPE
Germany: +49 611 962 6001
Italy: +39 0721 1796201
info-wfs@mann-hummel.com

AMERICAS
USA: +1 805 964 8003
sales.mnus@microdyn-nadir.com

ASIA
APAC: +65 6457 7533
China: +86 10 8413 9860
waterchina@mann-hummel.

MANN+HUMMEL

water-fluid-filtration.mann-hummel.com
mann-hummel.com