

> MicroFiltration

Clarification and Recovery of Industrial Wastewater

MEMKON

KONTEK MEMKON microfiltration systems are designed for the clarification of treated wastewater and process water.

KONTEK MEMKON microfiltration systems eliminate the need for clarifiers, polymers and multimedia filters to remove total suspended solids (TSS) from waste streams to meet critical discharge criteria (i.e. cadmium, lead, mercury). The filtered permeate can be further processed by a **KONTEK ROKON RO** system for water recovery and reuse.



Consistently meet compliant water discharge levels with durable membrane filtration systems

An ISO 9001 Company
Established 1980

Reduce Your Metal Discharge

Many manufacturing and metal finishers treat their metal bearing rinse waters through conventional treatment with a gravity plate settler. However conventional treatment can yield inconsistent metal discharge results. Microfiltration process effluent with proper pre-treatment, including coagulant additions, yields very consistent metal discharge numbers due to the nominal 0.1 micron rating that only allows particulate matter less than 0.1 micron to pass through the microfilter membranes. The net result is a greater ability to meet ever-tightening metal discharge limits. Furthermore, facilities can utilize this technology as a pre-cursor for water recycling through reverse osmosis.

MEMKON MicroFiltration Features:

- Membranes employ a moulded design, unlike others which are rolled from a flat sheet into a tube which then has a lengthwise seam, which creates a weak spot.
- Membranes are moulded from high purity sintered polyethylene, and have the capability of retaining all initial properties even after immersion into bleach for a one year period. Competitor's membranes typically become brittle after about 30 days of immersion in bleach. Bleach is a very commonly used cleaning agent, so corrosion resistance is very important.
- Membranes have tube walls that are 25-30% thicker and thus stronger and more robust than the competition.



Features and Benefits:

- Remove suspended solids from treated wastewater down to 0.01 microns
- With the proper chemical treatment of the wastewater, microfiltration will reduce sludge volume delivered to the filter press
- Fully automated, turnkey designs available
- Standardized designs, with flexibility for customization, in 5 - 20 gpm
- Dual or triple train design provides 100% uptime while one train is undergoing membrane cleaning.

HMI & PLC-based control system

- Adjustable back-pressure valve allows for control of permeate flow rate
- Automatic back pulse system clears the membrane surface to maintain optimal permeate rates
- Sample valve ports on each membrane housing permeate maximizes diagnostic capabilities
- Supplied with chemical cleaning solution recirculation pump and tanks
- Optional, completely automated cleaning cycle available, with chemical make-up systems