# **Ceramic Membrane Crossflow Liquid Filtration System**





Nominal 7,000 gal/day capacity model shown

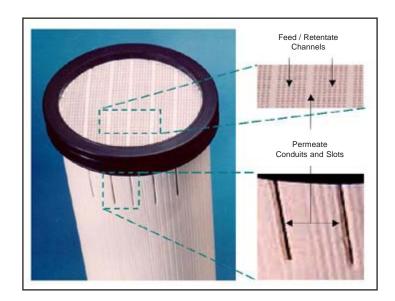
The Hilco Ceramic Membrane System is an ideal way to lower your filtration costs. The filtration system utilizes high-velocity "crossflow" across the membrane surface. The advanced-technology ceramic membranes deliver outstanding performance, durability, and cost-effectiveness. The robust filter design and high efficiency can help solve your tough filtration challenges. The filter is well-suited for multiple microfiltration (MF) and ultrafiltration (UF) applications. Available membrane pore sizes are 0.5 μm, 0.2 μm, 0.01μm, and 0.005 μm.

## **Fluid Streams Processed**

- Oil removal from wastewater streams
- · Reclaiming solvents and chemicals
- Fruit juice and beverage clarification
- Aqueous wash solutions
- E-coat paints and lacquers
- CIP cleaning chemical recovery
- Catalyst stream recovery
- Industrial laundry

#### **Features and Benefits**

- · High surface area to unit volume
- · Compact design
- Extended life with durable ceramic
- Chemically stable
- Broad pH range of 2-13
- Immune to chlorine actack
- Steam sterilizable
- Back flushable
- Suitable for aqueous and solvent/chemical streams
- High and sustainable flux rates
- Easy, less frequent membrane cleaning



#### **Membrane Filtration**

- 1. Filter has 1800+ channels
- Some channels are converted to permeate conduits
- 3. Permeate conduits allow the entire filter diameter to be effectively utilized
- 4. Patented membrane approach results in higher process flux

# Typical Results from a Wastewater Stream

Component	Feed (ppm)	Permeate (ppm)
Oils, Grease	136	1.0
Pb	0.79	0.09
Ni	0.15	0.01
Cu	1.49	0.36
Zn	5.9	0.37

### **Specifications**

**Filter Sizes:** 5.6" Diameter, 34" Long (120 ft<sup>2</sup> surface area)

1.05" Diameter, 12" Long (1.5 ft<sup>2</sup> surface area)

Standard Membrane Pore Sizes (microns): 0.5 µm, 0.2 µm, 0.01 µm, 0.005 µm

**Operating Parameters:** Maximum TMP of 60 psi

Maximum inlet pressure 85 psi Maximum differential pressure 30 psi Maximum backpulse pressure 100 psi

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