

Tubular Microfiltration Systems

Process and Water is a total solutions company to a diverse market place. We provide our clients the technical process design, proven equipment and aftermarket preventative maintenance services required to meet their internal process and operational needs.

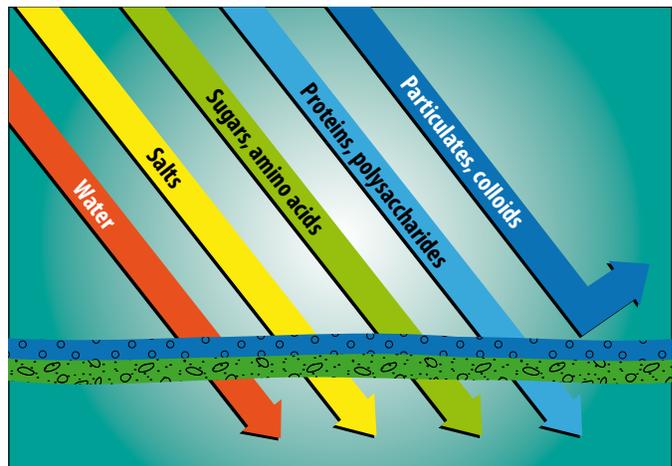
A compliance power house for metal bearing process wastes, our systems are replacing, large, expensive, resource burdens, such as chemical precipitation compliance systems. Our compact, innovative MF systemizations have been proven in the most challenging environments to be bullet proof compliance tools. Recent advancements in the membrane quality and designs on the market, means you get compliance, so critical to your long term viability, at the lowest cost per gallon of any technology available today. Microfiltration simply is the best long term compliance risk mitigation technology. An easy to understand summary starts you on the road to better understanding.

Microfiltration is a process where solute particles greater or equal to 0.1 micron are removed from the solution. This process requires feed rates of very high velocities at low pressures. Each Microfiltration module requires a 35 GPM cross flow with a feed pressure from 40 to 50 PSI.

A major benefit of the Process and Water's Microfiltration process is the 1-inch tubular modules cast in a synthetic mold. There are two module selections (1) contains ten (10) or (2) contains four (4) 1" tubes that allow higher micron rated particles to pass across the membrane surface without plugging the individual tubes and reducing permeate (product water) flow.



▲ 12 tube 40-60 GPM Microfiltration Process



Tubular Microfiltration

Typical Application

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 pH adjustment (pre-treatment) yields very consistent metal discharge numbers due to the nominal 0.1- micron rating that only allows particulate matter less than 0.1 to pass through the Microfiltration modules. This treatment process reduces operator time significantly. Furthermore applications utilize this technology as a pre-cursor for water recycle through reverse osmosis.

Let Process and Water develop a treatment strategy to meet the upcoming need for more stringent effluent discharge limits or water recycling objectives.