

ABOUT MICROFILTRATION (MF)

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WHAT IS MICROFILTRATION?

Microfiltration (MF) is generally referred to the filtration at less than 1 Micron level. Depth filters of the conventional type are available in 0.5, 0.2, 0.1 Microns and other sizes. Most Microfilters use membrane materials.

Spiral wound microfiltration membranes (mf membranes) allow a cross-flow type of microfiltration. Feed water at a relatively high flow is pumped at a pressure of 10-50 psi along the membrane surface. A small amount (5-10%) of the water goes through the membrane. The balance of water goes to the next membrane element or is recycled back. In addition, a small amount of concentrate is removed from the system.

This cross-flow process helps minimize the fouling of the surface of the microfiltration membrane. Many different materials have been used for Microfiltration but most common are Polysulfone (PS) and Polyvinylidene Fluoride (PVDF). Membrane elements in both of these materials are available from Applied Membranes, Inc.



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