FILMTEC Membranes
Cleaning and Sanitization: Effect of pH on Foulant Removal

Effect of pH on Foulant Removal

In addition to applying the correct cleaning sequence (alkaline cleaning step first), selecting the correct pH is very critical for optimum foulant removal. If foulant is not successfully removed, the membrane system performance will decline faster as it is easier for the foulant to deposit on the membrane surface area. The time between cleanings will become shorter, resulting in shorter membrane element life and higher operating and maintenance costs.

Most effective cleaning allows longer system operating time between cleanings and results in the lowest operating costs.

Figure 1 and 2 below show the importance of the selecting the right pH for successful cleaning.

**Figure 1. Effect of pH on the removal of calcium carbonate**

- **Calcium carbonate is best removed by cleaning with hydrochloric acid at pH 1-2.**

**Figure 2. Effect of pH on the removal of biofouling**

- **Biofouling is best removed by cleaning at pH 12.**
FILMTEC™ Membranes
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Notice: The use of this product in and of itself does not necessarily guarantee the removal of cysts and pathogens from water. Effective cyst and pathogen reduction is dependent on the complete system design and on the operation and maintenance of the system.

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