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Are Ceramic Membranes Ready for "Prime Time"?

If you had asked me this question just a few years ago, I would have said, "Not Yet!"

But my opinion has changed based on a greater number of installations, extensive pilot test data and several leading manufacturers involved in the industry. Ceramic membranes are definitely ready for challenging waters and at a much more affordable cost.

Their tough and durable materials of construction give ceramic membranes a higher tolerance to chemicals, temperatures and pressures. Ceramic membranes are expected to last up to 20 years or more giving them a productive life up to 4 times longer than fiberglass wrapped polyamide membranes. This is a critical factor to consider when evaluating a return on investment (ROI) for ceramic

systems. Currently, ceramic membranes are used in potable water production, food industries, industrial and wastewater applications.

Ceramics are mechanically strong and can be used in much more challenging separation applications, such as oil and high suspended solids. They are abrasion resistant and durable, with a resistance to degradation by a wide range of chemicals which allows more aggressive chemical cleaning procedures to be used over a wider pH range of 0-14. Ceramic membranes have a high resistance to ozone and chlorine, which allows for their use in systems applying disinfectants and oxidizing chemicals in the raw water. They are thermally stable and can withstand very high temperatures, a key benefit in applications that require high temperature sanitization.

If you need more information on ceramic membranes, stay tuned! An updated AMTA fact sheet will be available on our website soon. ■