APPLICATION CASE STUDY

Graver Technologies

ACS-012

Pleated Filters for Pre RO

Application:	Pre RO
Other Products Evaluated:	Evoqua PN W2T177996 20" Cartridge Filter
Graver Product:	Graver Technologies PMC1-20P3E

Discussion:

A diagnostics manufacturer was purchasing an Evoqua 1 micron pleated polypropylene cartridge filter for post treatment to an auto backwashing carbon filter, which also served as the a pre-filter to an RO system used to produce high purity water.   As part of their maintenance service contract, Evoqua re-bed the carbon bed and immediately they started to see short service runs on the 7-round 20" 1-micron filters.   The engineer on the project requested assistance from the distributor, who was active in other applications with Graver product, to resolve the issue. It was decided to evaluate the PMC 1-micron as the option. The initial test resulted in an increased on-stream life of three times the Evoqua filter.   The Engineering department submitted the change which was approved, resulting in the elimination of system upsets and extended change-out frequency to every 7-10 days, further reducing the labor required to maintain the system.

Results:

- The PMC filter resulted in higher throughput which resulted in less frequent change-out and reduced labor input.

- Graver's distributor was instrumental to this success by providing on-site technical support optimize the customer's filtration process.

- While melt blown is the more common technology in use as Pre RO, it is possible to justify the use of pleated cartridges within water systems when factor other than filter pricing is evaluated.

Additional Insights:

- Despite the existence of a service provider provider, for the water system, it is possible to have significant input into the technical aspects of the water system.

- Having current presence at the end user site resulted in them seeking assistance, edmonstrating that the best source of opportunities may be within current customer base.