**Application Case Study**

**LIQUID PROCESS FILTERS  GRAVER TECHNOLOGIES  1-888-353-0303  www.gravertech.com**

**MBF Filters Excel in Ethanol Plant**

**Application:** Ethanol Plant RO Prefiltration

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<tr>
<th>Current Product Used:</th>
<th>GE Osmonics Hytrex and Puretrex</th>
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<tr>
<td><strong>Graver Product:</strong></td>
<td>Graver Technologies MBF 1-40NN</td>
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**Discussion:**
An ethanol production plant required RO treated water for their boilers, cooling towers, and fermentation process. In all cases the incoming water was first treated by an RO membrane. Additional post RO treatment was then used to meet the water quality requirements of the end use of the water. For example, polishing softeners were used as a secondary treatment for the boiler water.

To protect the RO membranes from fouling, depth filters were selected as RO prefilters. The RO prefilters are used to remove incoming sediment and particulate from the source water and to reduce the silt density index of the water.

**Results**
- Graver MBF series filters provide excellent protection of the RO membranes.
- Efficiency of the Graver MBF filters matched the performance of the GE Osmonics products.
- MBF series filters provided the best value for the ethanol plant considering cost and efficiency.