



## RO Selection Guide for Industrial Water and Power Applications

Treatment Requirement	Description of Feedwater	ROSA Feed Descriptors**	Product Recommendation	Product Benefits
Highest Rejection Elements to Maximize Permeate Purity	Well controlled with a Low Fouling Potential	RO Permeate Well Water Dow UF™ Permeate Surface Supply SDI < 3	<b>BW30HR-440i</b>	<ul style="list-style-type: none"> <li>▶ Highest rejection for the highest quality permeate</li> <li>▶ High active area to reduce the number of elements and vessels to reduce CAPEX</li> <li>▶ Quantified specific solute rejection to aid in effective system design</li> </ul>
	Challenging or Problematic with a High Fouling Potential*	Surface Supply SDI < 5 Wastewater (industrial or municipal effluent)	<b>BW30XFR-400/34i</b>	<ul style="list-style-type: none"> <li>▶ Highest rejection for the highest quality permeate</li> <li>▶ Thicker, low dP feed spacer increases fouling resistance and cleanability, and reduces energy lost due to pressure drop</li> <li>▶ Quantified specific solute rejection to aid in effective system design</li> <li>▶ Extra fouling-resistant membrane chemistry for best operation in challenging waters with high biological and organic fouling tendency</li> </ul>
Low Energy Elements for Operational Cost Savings	Well controlled with a Low Fouling Potential	RO Permeate Well Water Dow UF™ Permeate Surface Supply SDI < 3	<b>HRLE-440i</b>	<ul style="list-style-type: none"> <li>▶ 30% lower energy than typical brackish water elements = the same quality water at 30% lower energy</li> <li>▶ High active area to reduce the number of elements and vessels to reduce CAPEX</li> <li>▶ Quantified specific solute rejection to aid in effective system design</li> </ul>
	Challenging or Problematic with a High Fouling Potential*	Surface Supply SDI < 5 Wastewater (industrial or municipal effluent)	<b>XFRLE-400/34i</b>	<ul style="list-style-type: none"> <li>▶ 30% lower energy than typical brackish water elements = the same quality water at 30% lower energy</li> <li>▶ Thicker, low dP feed spacer increases fouling resistance and cleanability, and reduces energy lost due to pressure drop</li> <li>▶ Quantified specific solute rejection to aid in effective system design</li> <li>▶ Extra fouling-resistant membrane chemistry for best operation in challenging waters with high biological and organic fouling tendency</li> </ul>

\*These streams are often characterized by high levels of biological activity, colloidal solids or high organic loads.

\*\*When designing an RO system with Dow's ROSA (Reverse Osmosis System Analysis) tool, select the water type that best describes your feed water so the program can automatically apply the appropriate design guidelines.