LG Water Solutions

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Technical Highlights and Chemistry Evolution of LG Chem's NanoH$_2$O^{TM} Membranes

The original introduction of NanoH2O high flux nanocomposite membranes in the year 2011 led to higher membrane flux while maintaining industry-standard salt rejection. The nanostructured membrane features a high degree of surface area and surface roughness yielding very high flux and built-in resistance to some types of fouling. This formulation is still utilized in the energy-saving LG SW ES membrane line.

LG SW SR/GR/R G2 products were introduced as the second generation nanocomposite membrane line that boasted higher salt/ boron rejection and comparable flux when compared to competitors' products. The membrane's higher rejection allows it to be operated at lower pressures while still meeting water quality targets and reducing energy.

In late 2015, LG Chem introduced its brackish water RO nanocomposite membranes, the technology of which developed from the first generation NanoH2O high flux membranes. LG Chem's BWRO membrane product yields extremely high membrane flux while rejecting salt under the spectrum of brackish water test conditions.

In addition to the energy savings and superior overall performance of LG Chem's NanoH2O high flux and high rejection membranes, these membranes deliver stabilized performance more quickly and provide a more accurate active area relative to competition.

For more information on the full line of LG Chem's NanoH2O RO membranes, please visit www.lgwatersolutions.com

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