LG Water Solutions



Technical Applications Bulletin 105

Technical Highlights and Chemistry Evolution of LG Chem's NanoH₂O[™] 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

Notice: The use of this product in and of itself does not necessarily guarantee the removal of cysts and pathogens from water. Effective cyst and pathogen reduction is dependent on the complete system design and on the operation and maintenance of the system. No freedom from any patent owned LG Chem, Inc. or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time. Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. LG Chem assumes no obligation or liability the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. All trademarks stated herein are properties of their respective companies. LG NanoH2O is a wholly owned company of LG Chem, Ltd. All rights reserved. @ 2020 LG NanoH2O, Inc.

Contact LG Water Solutions www.lqwatersolutions.com | waterinfo@lqchem.com