

INCREASE EFFICIENCY OF SPIRAL WOUND MEMBRANES WITH BETTER FOLD PROTECTION

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With the accelerating growth of spiral wound filtration elements in the water, food and beverage industries, design and process engineers are continually challenged with producing more efficient, reliable and effective membranes. Adhesive chemistry, application, and assembly techniques can substantially affect the overall performance of the membrane.

This paper addresses a new technology developed to improve the performance of the membrane by improving the membrane fold protection within the rolled elements. The improvement has significant impact on the performance of the element and the manufacturing process, including; improved speed of process, reduction of WIP, reduction of adhesive usage, reduced stackup (better dimensional tolerance), membrane surface area optimization (increase available membrane area), throughput speeds, and lower overall cost of production.