

MODULE AND FEED SPACER DESIGN CONSIDERATIONS FOR APPLICATIONS USING SPIRAL WOUND POLYAMIDE MEMBRANES

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Reverse osmosis and nanofiltration membranes are available in crossflow, spiral wound modules in a variety of sizes and configurations. This presentation outlines key characteristics which differentiate the design of one module from the next. We also will illustrate how these differences are suited to the conditions and requirements unique to the various industries and applications which use such membranes. Particular focus will be paid to the feed spacer design in spiral modules, which can be tailored to achieve benefits such as high active area, reduced osmotic pressure, low pressure drop, and/or reduced fouling. Several case studies demonstrating the benefits of novel spacer technology in these areas will also be presented.