

S2.6.1 HIGH PERFORMANCE SPIRAL ELEMENT FOR HIGH FLUX MEMBRANES

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Spiral Membrane Elements traditionally use only a small proportion of the available membrane surface area. FAST International has developed a modified spiral element design that increases the available membrane area usage up to 100% with recoveries of more than 75% in a single element. This high recovery rate can cause premature membrane fouling. FAST International has recently applied for a patent on an additional element modification that maintains the feed velocity even with this high recovery. This paper will provide data on the results of these developments from both laboratory and field trials.