

S1.5.3 USE OF A NOVEL MEMBRANE TECHNOLOGY TO TREAT INDUSTRIAL PROCESS AND WASTE WATERS

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Recent advancements in membrane filtration technology allow broader use of spiral wound filter elements for treating industrial process and waste waters. Environmental regulations, water scarcity and ever increasing disposal costs have created a need for economical water treatments that allow for reuse. This paper will review a novel membrane with a unique composite single layer microstructure providing high flux, excellent separation capabilities and durability. The presentation will review the intrinsic membrane properties that create a durable, fouling resistant and high flux membrane. Lab scale and pilot field tests will be reviewed in a variety of industries including paint manufacturing, oil and gas industry, automotive process water, grey water and reverse osmosis pretreatment. The case studies will focus on how the new filtration technology met real world customer needs allowing scale-up to larger field tests or commercial units. Concepts for even high flux filter elements will be highlighted in lab scale test results.