

Membrane Filtration



Reverse Osmosis
Nanofiltration
Ultrafiltration
Microfiltration



Napier Reid – Since 1950

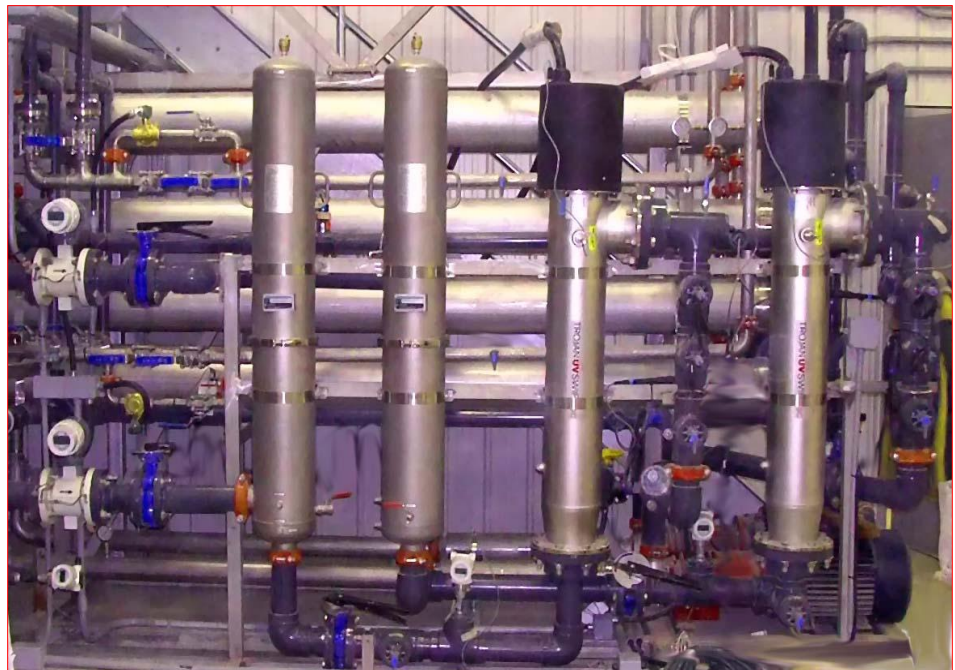
Napier Reid Limited has over 60 years of experience in the water and wastewater treatment industry and has over 3,000 installations worldwide. Napier Reid designs and fabricates a wide variety of membrane filtration systems that can be categorized based on driving force, membrane type, configuration and removal capabilities.

Napier Reid's membrane filtration systems are widely used in municipal and industrial water and wastewater treatment.



Reverse Osmosis (RO) system

N-R's RO systems are used for the production of drinking water from seawater, production of boiler feed water and ultra pure water for municipal and industrial applications. These systems are capable of removing silica, dissolved solids and salts, dissolved organics, pesticides, synthetic organic chemicals (SOCs) and color.



Typical operating pressure ranges from 75 to 1200 psi. Typical product water recovery depending upon membrane configuration and feed water characteristic varies from 30 to 90%. N-R's RO filtration systems retain particles up to 0.0005 micron or 100 MWCO.

Nanofiltration system

Nanofiltration is a pressure related process, during which separation takes place, based on molecule size. N-R's Nanofiltration systems operate in cross flow filtration mode. It is widely used in production of drinking water and softening. It removes bacteria, viruses and chlorine resistant pathogens such as giardia and cryptosporidium, dissolved organics, pesticides, heavy metal, nitrates and color.



Typical operating pressure ranges from 50 to 450 psi. Typical product water recovery depending upon membrane configuration and feed water characteristic varies from 75 to 90%. N-R's Nanofiltration systems retain particles up to 0.001 micron or 100 to 20,000 MWCO.

Ultrafiltration System

Napier-Reid's Ultrafiltration system is designed to remove turbidity, colloidal silica, iron, manganese, total organic carbons, bacteria, viruses, and chlorine resistant pathogens (giardia and cryptosporidium) from municipal drinking water. The system incorporates hollow fiber membranes.

Typical operating pressure ranges from 3 to 150 psi. Typical product water recovery depending upon membrane configuration and feed water characteristic is greater than 95%. Degree of filtration ranges from 0.005 – 0.1 micron (1,000 – 500,000 MWCO).

Microfiltration System

N-R's Microfiltration systems are widely used in process water and wastewater treatment industry. They are used as pre-treatment to ultrafiltration, nanofiltration and reverse osmosis; used for removal of suspended solids, insoluble metal hydroxide solids and turbidity reduction.

Typical operating pressure ranges from 3 to 100 psi. Typical product recovery is greater than 95%. Degree of filtration ranges from 0.1 – 3 micron.

APPLICATION

Municipal Water

Municipal Wastewater

Industrial Wastewater

Wastewater Reuse

Food and Beverage



About Napier - Reid

Over 60 years of excellence in water & wastewater treatment

Napier-Reid is located in the greater Toronto area in the Province of Ontario, Canada. We supply engineering services and process equipment for water and wastewater treatment.

We have the technology, resources and experience to design, manufacture and implement innovative water and wastewater treatment solutions worldwide. We have completed over 3,000 projects since our inception in 1950. This stands as a testament of our ongoing commitment of providing the highest quality service, products and after sales support in the industry. Our capabilities include engineering, manufacturing, installation and field support. We have in-house personnel for complete mechanical, electrical and instrumentation process and control system design. As a manufacturer, our designs focus on cost-effective solutions, simplicity of installation and ease of maintenance.

Napier-Reid has developed an excellent team with many years of experience. We have a well-deserved reputation for innovation, service and integrity. A significant portion of Napier-Reid's business is now exported to regions such as the Caribbean, Central America, South America, Middle East, Eastern Europe, Africa, and Asia. Some of these projects are financed by Canadian government or International financing institutes. As a Canadian manufacturer, we are eligible for Canadian governmental funding and EDC export credit. We have the capability to handle a large range of projects, from engineering, equipment supply, installation, start-up, to turnkey projects. Let Napier-Reid be your single solution for water and wastewater purification.



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