



The Dynatec Difference

Higher Quality

- Rugged construction
- Pressure, temperature and flow using transmitters
- Easy to navigate HMI screens
- CPVC pipe to allow warm cleanings

Better Performance

- Positive circulation rate produces higher and more stable flux
- High concentration due to low reject with large tubular modules
- 100% removal of suspended and colloidal contaminants

Greater Dependability and Reliability

- High performance stainless steel dynamic seal pump
- High quality transmitters
- High stable flux
- External membrane skids

Lower Operating Cost

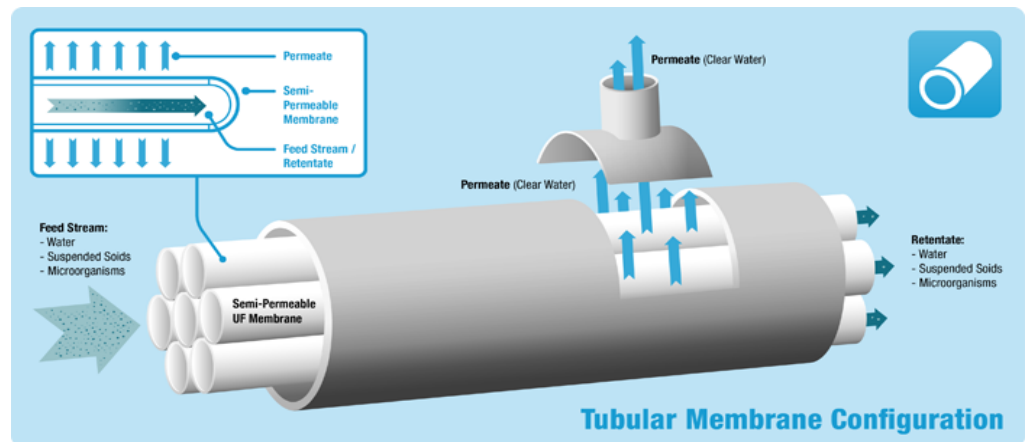
- Less cleaning time and chemical
- Less concentrate haul away
- Extremely long membrane life

Membrane Configuration

Ultrafiltration membrane systems in a tubular configuration

Different membrane configurations can be used for ultrafiltration process. Commercially available designs in ultrafiltration modules vary according to the hydrodynamic and economic constraints, as well as, the mechanical stability of the system under particular operating pressures.

Tubular Membrane



The tubular module design uses polymeric membranes cast on the inside of plastic or other components with diameters typically in the range of 5 – 25 mm with lengths from 5 – 20 ft.

Multiple tubes configurations are housed in a PVC, FRP or stainless steel shell. The feed of the module is passed through the tubes, producing radial transfer of permeate to the shell side. This design allows for easy cleaning.

Tubular modules are used in cross-flow, where the feed stream is passed over the surface of the membrane. Permeate passes through the membrane while the components of the feed stream that cannot pass through the membrane is retained and passes through and out of the system.

Low energy and high rate cross-flow operation are employed using tubular membranes, depending on the feed fluid.

Conventional Cross-flow Operation (HiRate™)

The feed fluid passes across the membrane surface at high flow rate in order to minimize the boundary layer of the foulants on the membrane surface. This operation is used in more difficult treatment streams, such as oily waste, and where organic and scale-forming contaminants are present

Low cross-flow operation (HyBrid™ & DynaLift™)

The feed fluid passes across the membrane surface at lower flow rate. The DynaLift™ uses air to help create energy at the membrane wall to minimize the fouling layer. Periodically, the membrane is backwashed to prevent foulants from accumulating on the membrane surface.