

Brain **CYCLOVAP** Cyclonic Evaporator Water Treatment System

The Cyclonic Evaporator (CycloVap*) is a highly innovative, patented, and environmentally friendly evaporator which is set to revolutionize the way evaporators have been perceived within industrial and engineering communities.

While traditionally, evaporators have been plagued by high energy consumption which has often caused them to be financially unviable, they do have relative advantages over other systems designed to allow for water reuse.

Evaporators have the advantage of lower maintenance costs, than membrane systems such as Reverse Osmosis and Nano-Filtration. They also respond much better to fluctuations in the wastewater feed concentration and composition.

The CycloVap* is a unique, new evaporator. Its' design is based on traditional rising or falling film evaporators of the plate or tubular type. Due to greatly enhanced heat transfer coefficients and the ability to handle viscous and scaling materials without the premature loss of performance, the CycloVap* has solved the problem of high energy usage that has plagued other evaporators in the past.



Features and Benefits

- Thin liquid films, generated by the ISG*, produce high heat transfer coefficients.
- Handles viscous and scaling products.
- Energy input may be from many sources including an option for vapour recompression.
- Multiple effect systems reduce energy input.
- Capital cost is typically as much as 30% less than equivalent evaporators.
- Footprint is reduced by as much as 90% over comparative evaporators.
- Recovery and reuse of de-mineralized water from process or waste streams.
- Concentration of dilute products or wastes for reuse.



Specifications.

Process Capacity: 1m³ – 30m³ hr
Height : 2.2m
Width : 2m – 6m
Length : 3.5m – 10m
Weight : 1500kg – 8000 kg
Material : Stainless Steel 316