

Freezotech

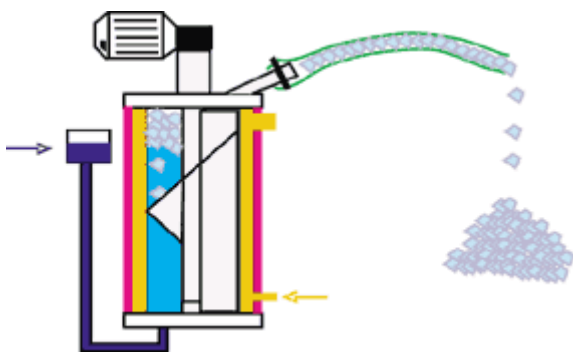
Water Minimization Technology.

Freezotech utilizes a new innovative application of existing, proven technology, to bring about extensive water savings to the industry.

Theory and Discussion

The Freezotech concept is similar to the natural formation of Sea Ice at the North and South poles, where ice forms underwater on the underside of ice floes. In the Freezotech design the ice forms under water on a refrigerated surface and is harvested by a rotating blade. The harvested ice is guided up above the water level where it is ejected for use. Like the polar ice it is in the form of very fine crystals of pure ice.

The ice is ejected from the machine in a soft form which is approximately 70% frozen and 30% concentrated brine. The brine drains away leaving behind dry pure ice.



The Freezotech design is so simple that it does not even have seals for refrigerant or water yet can be opened up in minutes for inspection.

Application

Freezotech can concentrate contaminated or hyper saline effluent much more than reverse osmosis and much cheaper than evaporation can.

Use Freezotech to:

- Re-use RO Brine as cooling water.
- Recover up to 90% of Cooling tower Blowdown
- Minimize Hazardous effluent to minimize incineration or evaporation costs.
- Use Ice to reduce Cooling Tower Temperature, thereby saving more water due to lower evaporation.

