



ECOMISTER
EVAPORATOR



HD30 EcoMister Evaporator

Evaporator Model Specification

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Our most popular **HD30 EcoMister Evaporator**, our signature series which we have developed over more than 20 years, is designed to operate 24 hours a day, 365 days a year.

All units in the HD series are designed to operate in the harshest environments, and are available in **land based**, trailer based and float-based configurations depending on your specific needs. Pump packages are also available to match the needs of your site along with wind speed and automated control systems.

BENEFITS AND FEATURES

Longevity in the Harshest Environments

The HD30 EcoMister is built with our patented stainless-steel axial flow turbine and our stainless-steel directional wind tunnel, and both are coated with specially blended 3M™ Scotchkote™ for durability against the elements and to meet the corrosive conditions of operating sites. Motors are built to exceed IEEE-841 Severe Duty standards and are 3rd party tested to guarantee a 0.5 mil vibration rate to maximize the motor's operational lifetime.

Best in Class Evaporation

Equipped with a dynamically balanced aluminum fan and our directional air delivery tube which creates laminar air flow, the spray pattern is engineered to reduce water particle collision and to reach maximum loft or "hang time". This longer "hang time" along with a specifically engineered droplet size maximizes your evaporation efficiency.

Low Operating Costs

To maximize efficiency and minimize operational costs the turbine is spun to a specific size allowing for manufacturing tolerances of fewer than 30 thousandths of an inch. This allows the turbine to operate at lower horsepower requirements but provides air volumes comparable to a much larger and more costly unit. Systems are designed for minimal maintenance and down time through thoughtful design like simplified greased ports on the motors to a quick release camlock on the nozzle ring manifold.

Flexibility

Each evaporator is available in multiple base configurations including fixed land based, trailer based, and float based, providing the best solutions and setup for the needs of each site. A simplified pitch adjustment system allows the operator to easily adjust the direction and angle of the wind tunnel to optimize plume control and evaporation efficiency in varying site conditions.

Specifications

- Max Throw from Machine (Length) is 55 m (180 ft)
- Annual Disposal Volume at 50% Efficiency is 79,400 Cubic Meters (>21,000,000 US Gallons)
- Manufactured from a combination of stainless steel and carbon steel
- All wetted components are 316L Stainless Steel
- Our biggest enhanced evaporation fan at 30”
- Our most popular coating system, Scotchkote™ 134 powder coat
- Custom manufactured electric motor that exceeds the IEEE 841 standards, with stainless steel motor shafts (HD) and specialty high corrosion resistant paint
- Motors are designed with a 50% safety margin to allow for excessive cabling runs and power quality (traditionally installed 40 HP motor, **actual operational demand 23.5 HP**)
- Dual independent fan support bearings separated by vibration coupling which does not allow thrust/vibration to transfer from fan thrust and/or fan vibration to the motor.
- Powder coated Aluminum fan. **It is also available in Stainless steel for severe corrosion applications**
- Independently inspected quality controlled
- Quality control to ensure that operational vibration is below 0.5 mil
- Quick release nozzle ring with **Teflon nozzles**
- Available in a variety of configurations from land based, float based to units with sound enclosures
- Pump volume thru unit is **80.1 US GPM or 18 m³/hr. at 150 psi**
- Average weight of standard equipped land base unit is **1,540 pounds**
- **WARRANTY:** All units have a minimum one-year parts and labor warranty, 2 years on IEEE841 motors



Figure 1 - HD30 EcoMister Evaporator