





# HD24 EcoMister Evaporator

## **Evaporator Model Specification**

### HD24 EcoMister Evaporator

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 sensing automated control systems.

#### BENEFITS AND FEATURES

#### Longevity in the Harshest Environments

The HD24 EcoMister is built with our patented stainless-steel axial flow turbine, 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 tested to reduce vibration rate to maximize the motor's operational lifetime, while minimizing maintenance.

#### Best in Class Evaporation

Equipped with a dynamically balanced aluminum fan and our directional air delivery tube which creates powerful air flow, the spray pattern is engineered to reduce water droplet collisions and to reach maximum loft or "hang time". This longer "hang time" along with a specially 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 fan 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 and 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**

- Maximum Horizontal Throw is 18 m (60 ft)
- Annual Disposal Volume at 50% Efficiency is 58,600 Cubic Meters (15,500,000 US Gallons)
- Manufactured from a carefully selected combination of stainless steel and carbon steel
- All wetted components are Stainless Steel
- Our mid-range enhanced evaporation fan with a diameter of 24"
- A robust coating system, Scotchkote<sup>™</sup> 134 powder coat
- Custom designed electric motor that exceeds the IEEE 841 standards, equipped with a stainless-steel motor shaft (HD) and specialty corrosion resistant paint
- 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
- System is vibration tested to ensure optimal and long lasting operation
- Powder coated Aluminum fan. It is also available in Stainless steel for extremely severe corrosion applications
- Attention to detail during manufacturing with stringent quality control
- Quick release nozzle ring with Teflon nozzles
- Pump volume throughput unit is 15 m³/hr at 690 kPa (66 US GPM at 100 PSI)
- Average weight of land base unit is 700 kg (1,240 lbs)
- WARRANTY: All units have a minimum one-year parts and labor warranty, 2 years on IEEE841 motors



Figure 1 - HD24 EcoMister Evaporator