

SMI 420F EVAPORATOR



OVERVIEW

The SMI® 420F Evaporator is a floating unit, designed for effective operation in small areas, especially sites containing large particles or highly corrosive water. The 420F Evaporator is durable, simple to use and easy to maintain – a reliable way to manage excess water.

BENEFITS

Low Buildup: the SMI® 420F Evaporator is designed with a minimal amount of top surface area to control the build-up of residue or ice, helping to reduce clean up and maintenance!

High Performance: High-speed fan blade rotation creates an optimum water droplet distribution for evaporation. Annual evaporation rates up to 70% have been achieved with the 420F, and averages are typically between 25% and 60%. Evaporation rates depend on many factors, including ambient temperature, relative humidity, water make-up and wind conditions.

Easy Maintenance: The machine is designed for easy cleaning and maintenance. It requires no weekly bearing lubrication, as it is lubricated for the life of the motor.

Minimal Clogging: The SMI® 420F Evaporator can pass particles up to 3/16 inch (4.7 mm) in diameter, which reduces the need for pre-filtering, filter cleaning and the hassles of clogged nozzles.

Extreme Duty: This design has evolved from 10 years of experience in industrial and extreme outdoor applications. Polyethylene pontoons are filled with closed-cell polyurethane foam, ensuring buoyancy even after any accidental puncturing of the plastic outer shell. Critical components are manufactured from stainless steel for extended life in harsh environments.

FEATURES

Floating unit supported by plastic pontoons containing closed-cell PU foam

Low plume height for shorter drift distance, allowing longer operation in swirling or changing winds

Heavy industrial construction, including stainless control panel, motor enclosure, manifold and fan blade, increasing durability and life span

Vibration sensor included to shut down motor before catastrophic failure due to residue or ice build-up

Stainless steel submersible pump attached to floating frame



SMI 420F EVAPORATOR



Fan



Frame



Pontoon



SPECIFICATIONS

Fan and Head Assembly

- Stainless steel 20 inch diameter 12 blade patented fan
- Stainless steel enclosure protects fan motor and enhances cooling
- Vibration sensor for motor shut down due to fan imbalance

Floats and Platform

- Galvanized steel frame structure using stainless steel fasteners
- 4 polyethylene UV stabilized pontoons
- Pontoons filled with closed-cell polyurethane foam

Water System

- 7.5 HP stainless steel submersible pump
- Pump requires 480 volts, 3 phase, 60 cycle power
- Stainless steel spray manifold, designed to provide 66 GPM (250 LPM) at 100 PSI (7 Bar) water pressure
- Ball Valve to regulate flow to spray manifold for changing weather conditions

Electrical

- 25 HP Premium efficiency fan motor
- Fan motor rotates at 3600 RPM at 480 volts, 3 phase, 60 cycle power or 2900 RPM at 400 volts 50 cycle power
- Stainless steel control panel with start and stop buttons
- 200 feet (61 M) electrical power cord

Warranty

- 6 month warranty on all parts and workmanship

Options

- For acidic or high alkaline water applications, stainless steel construction and acid-resistant coating
- Y-line manual flush filter for dirtier water
- Automation, to shut down and start-up evaporator due to wind speed and direction, temperature and humidity



Evaporative
Solutions

E V A P O R . C O M

SMI Evaporative Solutions

1512 North Rockwell Dr.
Midland, MI 48642
Tel: +1.989.631.6091
Fax: +1-989-631-3162
Toll Free: +1-800-248-6600
evapor.com