

# ThermoFlo®

## Surface Spray Cooler



The Leader in Wastewater Treatment

The cooling of high temperature process water prior to biological treatment or final discharge is a necessity for many industrial and utility plants.

Typically, conventional cooling towers or cooling ponds have been utilized for the dissipation of heat from flow streams. An alternative to these types of cooling methods is the ThermoFlo® Surface Spray Cooler. Spray cooling is highly successful in achieving heat reduction in a variety of process water applications.

## FEATURES

- High Mechanical Reliability
- Economical Alternative to Cooling Towers
- Low Capital Costs
- Clog-free Nozzles
- Conventional Mooring
- Easily Installed
- Low Maintenance



Aqua-Aerobic Systems, Inc.



Pictured is a 75 HP ThermoFlo Surface Spray Cooler.

## Quality Design

The distinctive design of the ThermoFlo® spray cooler allows for optimum pumping capacity by utilizing an axial-flow propeller-type pump. The clog-free nozzle is engineered to provide optimum spray volume, height and pattern. The 360 degree cone discharge creates a continuous uniform spray for efficient heat dissipation and cooling.

Above water manifolding is available in 304 and 316 stainless steel. This type of manifolding allows easy installation and maintenance and simplified mooring. The ThermoFlo® float assembly is constructed of heavy gauge 304 and 316 stainless steel and filled with closed-cell polyurethane foam.

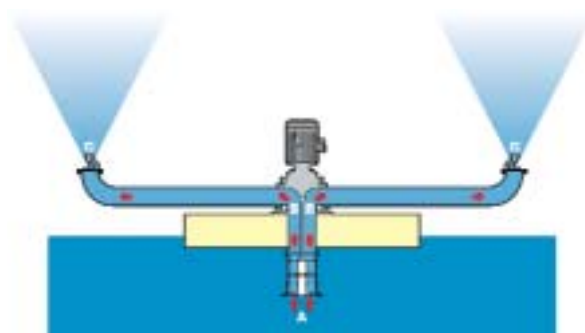
## Motor Requirements

The ThermoFlo® spray cooler utilizes a Totally Enclosed Non-Ventilated (TENV) motor. A special labyrinth seal located in the bottom portion of the motor prevents the migration of moisture into the motor. Regular maintenance and inspection of the power module is easily accomplished without disassembly of the piping or float. All motors are constructed to Aqua-Aerobic Systems' strict specification and designed to meet stringent operational requirements. Units are available in sizes 25, 50 and 75 HP.



ThermoFlo units at a utility plant.

## Simple Operation for Care-Free Cooling



### DESCRIPTION OF OPERATION

- A)** Process water is pumped into and through a heavy-duty cast manifold.
- B)** Process water is then efficiently divided and directed to each of the unit's spray arms.
- C)** Final discharge of process water occurs at the end of each spray arm through a cast anti-clog nozzle.