

# **SURFACE ASPIRATING AERATOR SPECIFICATION**

## **A. General**

The successful supplier will provide a total of \_\_\_\_\_ Surface Aspirating Aerators, as supplied by AEROMIX of Minneapolis, Minnesota. Each will be of \_\_\_\_ horsepower (\_\_\_\_ kw), and shall draw air from above the surface of the water and inject it, through a specially designed propeller, below the water surface. The propeller shall break up the aspirated air into fine bubbles and thoroughly mix the oxygen with the water. The aerator shall also de-stratify and provide horizontal water circulation without the need for additional components or accessories.

## **B. Aerator Specifications**

Aerator shall consist of a stainless steel draft tube and a solid stainless steel shaft connecting the motor and propeller. The shaft shall be supported by at least one bearing to provide vibration resistant operation. The aerator shaft shall be coupled to the motor with a flexible coupling that allows for easy removal of the motor. All fasteners shall be stainless steel.

## **C. Propeller Specification**

A non-fouling, high-efficiency, low-vortexing propeller shall be used. The propeller shall be precision cast stainless steel complete with stainless steel diffuser for proper air distribution.

## **D. Motor Specifications**

1. Motors shall operate at \_\_\_\_\_ VAC, \_\_\_\_\_ hertz, \_\_\_\_\_ phase.
2. The motor shall meet all provisions of the applicable codes of NEMA, be totally enclosed, fan cooled (TEFC) and have a service factor of 1.0 or greater.

## **E. Float Specifications**

1. Floats shall be foam-filled, low-density polyethylene with ultraviolet inhibitor. Foam shall be water resistant rigid foam.
2. The aerator shall mount to this float by means of two pins, so the mounting angle can be adjusted without removing the aerator from the float. A locking device shall be incorporated into the mount to firmly hold the aerator in position at the chosen angle.

## **F. Cold Weather Operation**

The aerator shall be designed to operate year-round without spraying, splashing or ice build-up.

## **G. Miscellaneous**

All components of the Surface Aspirating Aerator shall be manufactured in whole or in part in the United States.