

MULTI-FUNCTION DEVICE USED FOR INTENSIVE SHRIMP FARMING AND INTENSIVE SHRIMP FARMING SYSTEM USING THIS DEVICE

Abstract

Provided are a multi-function device for intensive shrimp farming and intensive
5 shrimp farming systems using this device. The system comprises: shrimp ponds (100)
with brackish water pumped from rivers or seas then treated with chemicals,
sedimentation and micro-organisms; at least one multifunction device (200) to generate
water flow, dissolve molecular oxygen, deliver and dispense shrimp feed and provide
solution containing minerals, micro-organisms and other additives; pure oxygen supply
10 device (300) capable of generating oxygen from the air to supply oxygen with purity
higher than 90% to water in intensive culture pond to achieve consistently higher
concentrations of dissolved oxygen saturated dissolved oxygen concentration; a network
of porous sheets floats on the water to reduce the diffusion of oxygen molecules from
the water to the air; and a network of lights for providing artificial light to change the
15 feeding cycle of shrimp with industrial and natural food. The system according to the
invention, with the integration of many parts (wherein the multi-function device is the
most important), helps to highly automate the shrimp farming process, the parts are
arranged reasonably, coordinate and operate flexibly to help the shrimp farming system
be more active and high intensification, improve the efficiency in shrimp farming, and
20 reduce production costs.

[Fig.1B]