## **TopUp Ball System™**

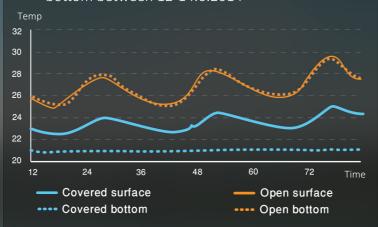
The Top Up Ball System™ is a modular cover system for water reservoirs, which consists of symmetrical balls with unique rims and an inner float.



## The innovative design of the Top Up Ball System™ allows for:

- Significant reduction of evaporation while cooling the water
- Maintaining high water quality
- •Reduced growth of harmful algae while preserving a healthy ecosystem

Reservoir temperatures at the surface and the bottom between 12-14.6.2014



## Main advantages

- Reduces evaporation by up to 94%
- •Lowers temperature by up to 6º C in warm climates
- Improves water quality
- Reduces growth of harmful algae
- Maintains high levels of dissolved oxygen
- Reduces salinity
- Easy to install and remove
- Very long life span
- Maintenance free
- Free passage of rain and hail through the cover
- Bird deterrent for use near airports and flight paths
- Resistance to extreme winds
- Reduces odors
- Easy connection for partial covering and creation of shapes
- Supports existence of fish
- Cost effective

## **How It Works?**

The TopUp Ball™ comprises two identical semi-spheres with a float in the middle. When each ball is thrown into water it fills exactly half way . Due to the particular design of the ball, water from the bottom half evaporates into the top half where it perpetually condenses and returns back down. This evaporation—condensation process creates thermal distillation which kills parasites and enhances water quality.

New water constantly enters from side openings in the lower half of the ball and heavier water is released into the reservoir from the lower holes. As a result, there is an ongoing circular flow and no standing water.

Air in the top half of the ball is released from the upper holes and creates a difference in pressure between the lower and upper areas, which allows for a flow of cooler air from the side openings. This creates a cooling effect which reduces the temperature of the ball and, consequently, the water in the reservoir. Under certain conditions, the outer surface of the ball also collects dew.



Patent Pending