

AXORA

**Modular floating cover water conservation
system**

The technology
marketplace for
heavy industry

axora.com



CONTENTS

3	How it works
4	Top business benefits
5	Customer success stories
6	FAQ
7	About Axora
7	About the Solution Provider
7	Your next steps

MODULAR FLOATING COVER WATER CONSERVATION SYSTEM

How it works

Mining is one of the most water-intensive industries, with water playing a vital role in operations and processing. As the fight against climate change continues, companies must re-evaluate operational processes and procedures to mitigate their environmental impact. Many mining operations face water usage, scarcity and discharge concerns and are searching for ways to conserve and protect their water sources.

This solution is a water conservation system that helps preserve water by significantly reducing evaporation and other harmful hazards. It's a modular floating cover composed of hollow plastic hexagon discs made from high-density polyethylene with carbon black and antioxidant additives.

This differs from the traditional balls by being more effective and easier to control and maintain.

It acts as a water-surface shield, and the innovative design means the cover sinks slightly under the surface instead of floating on top. This guarantees full coverage and water protection and stops it from being removed in strong winds.

This shield can help mining companies protect water sources from evaporation. It is also proven beneficial to operations relying on leaching as it helps maintain the temperature of the solution in colder climates. It's suited for all industrial ponds, such as those used for process water or tailings.

The solution provider has also created software using an algorithm that can analyse evaporation rates anywhere in the world using the coordinates and weather trends of the area. This software can measure evaporation rates pre- and post-installation for comparison purposes.

Key facts

Up to

95%

reduction in the presence of
algae

Up to

97%

reduction in evaporations
and odour emissions

Up to

75%

reduction in heat loss

TOP BUSINESS BENEFITS

There are many business benefits of this water conservation solution:

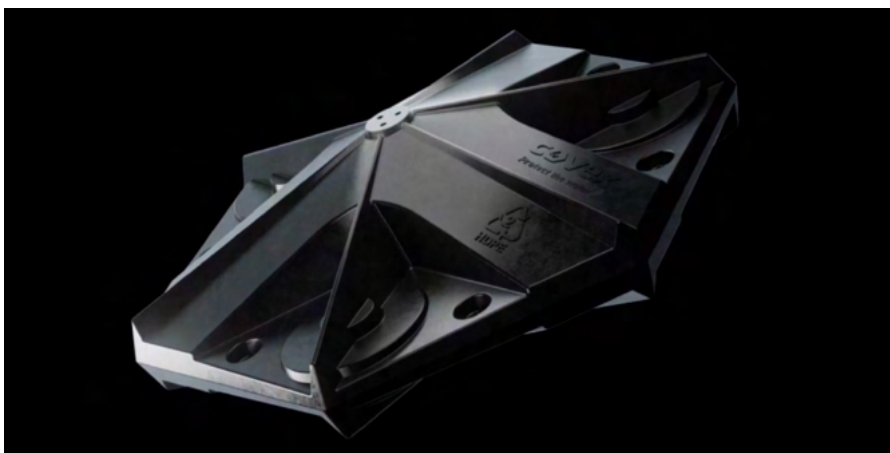
- › Up to 97% reduction in evaporation
- › Reduces the presence of algae by up to 95%
- › Up to 75% reduction in heat loss
- › 97% reduction in odour emissions
- › Easy installation
- › Minimal maintenance requirements
- › A lifespan of 20+ years

Floating covers have been on the market for decades, but with its high durability and robust design, this modular cover offers a more efficient and effective solution than its competitors. Its sturdy design provides excellent wind resistance.

Covering the surface with the hexagons eliminates the liquid-gas interface, blocks sunlight entrance and acts like a shield. This significantly reduces evaporation, algae growth odour emissions and heat loss.

It reduces energy costs by maintaining temperatures on the surface, and in colder environments, the insulation properties significantly delay the freezing point by many hours.

This product is environmentally friendly, and the plastic is 100% recyclable. It can also be manufactured using new or recycled HDPE. With minimal installation and maintenance requirements, the cover reduces the labour costs required to maintain reservoirs.



Modular floating cover

CUSTOMER SUCCESS STORIES

A large city water reservoir

Customer challenge:

A major city was looking to manage the prevalence of bromate (carcinogenic) in their reservoir water. Due to how bromate forms in water, they needed to find a way to block sunlight.

Solution:

The solution could handle the heavy winds common to the area and significantly reduce sunlight exposure, which reduced bromate levels in the reservoir and improved water quality. They also saw a significant reduction in algae and evaporation levels.

Many mining operations, such as ones operated by **Codelco, Anglo American, Teck Resources** and **BHP**, use this floating water cover.

FAQ

Does the installation of the covers affect water quality?

No. The plastic used to create the hexagons, the carbon black and the antioxidant additives are non-toxic and are not known to cause health and safety problems. The same plastic is used worldwide in water pipes, bottles etc.

What is the total coverage of the floating covers on the surface?

The hexagons cover 98% of the surface.

How does it reduce evaporation?

The hexogen shields reduce evaporation by eliminating liquid-atmosphere interface.

About Axora

Axora is the global technology **marketplace** for heavy industry. We source the best innovative solutions, to solve the biggest industrial problems.

Our service helps industrial companies to discover, evaluate, procure and deploy technology from all over the world.

Entrusted globally by 100s of industrial leaders and innovative solution providers, we help companies take action to hit their safety and sustainability goals.

Your next steps

→ [Email us](#)

About the Solution Provider

This water conservation company is passionate about protecting water and maintaining its quality. It has developed a innovative solution to mitigate evaporation, algae growth and other harmful water hazards. Working across multiple sectors such as mining, agriculture, oil and gas and wastewater treatment, they have proven to deliver significant results to their customers.

AXORA

The technology marketplace
for heavy industry

axora.com

