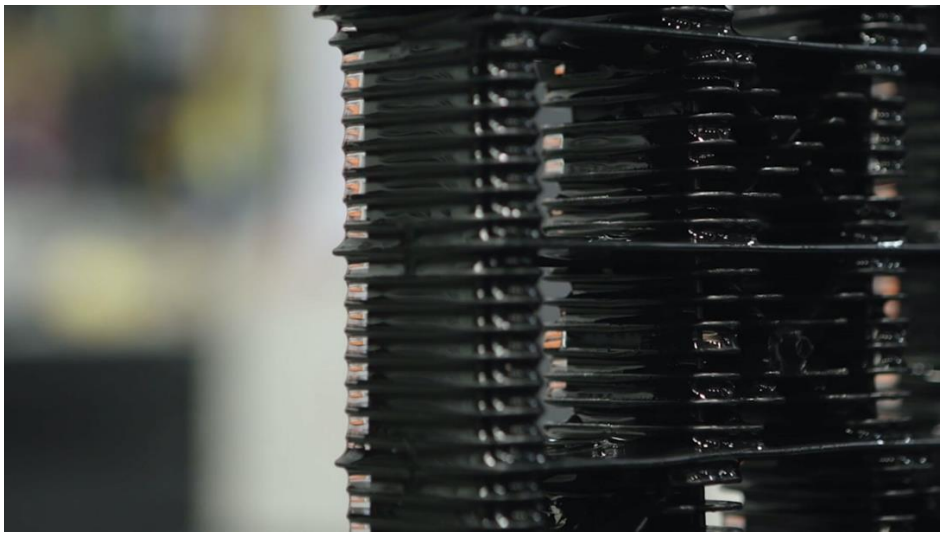
ECOVAP EVAPORATIVE MATRIX™ TECHNOLOGY



A BREAKTHROUGH FOR WATER

Fluid dynamics meets HDPE in EcoVAP Evaporative Matrix™ panels, which contain patented helical discs to suspend water across the largest surface area possible, accelerating natural vaporization.

This significant water handling advance is delivered in lightweight, interlocking panels, which produce endless application designs to suit an operation and its site requirements. Injection molded HDPE, the most durable, corrosion-resistant material available, ensures maintenance-free durability for modular installations that can be scaled, re-configured, and ultimately recycled at end of their 50-year life.

SAFEGUARDING OUR FUTURE BY RETURNING WATER TO THE ENVIRONMENT NATURALLY

A 100% RECYCLABLE SOLUTION THAT RETURNS BILLIONS OF GALLONS CLEAN WATER TO THE HYDROLOGIC CYCLE

EcoVAP Evaporative Matrix™ technology makes the preservation of freshwater on our planet viable here and now. By replicating the natural water cycle, this innovative technology restores, recovers, and returns freshwater to the environment sustainably. A more efficient solution than conventional land- and energy-intensive evaporation, distillation, or filtration solutions, EcoVAP safely processes in days what would ordinarily take months, without the resulting costs, risks and environmental impacts.

With more than 2,100 issued and patent-pending claims, EcoVAP is poised to disrupt a century of conventional water handling by providing water-intensive industries a sustainable solution for the future.

Efficient:

- + Power-independent
- + At least 6,000% faster than conventional evaporation

Economical:

- + 95% reduction in water handling costs
- + 90% reduction to required land footprint

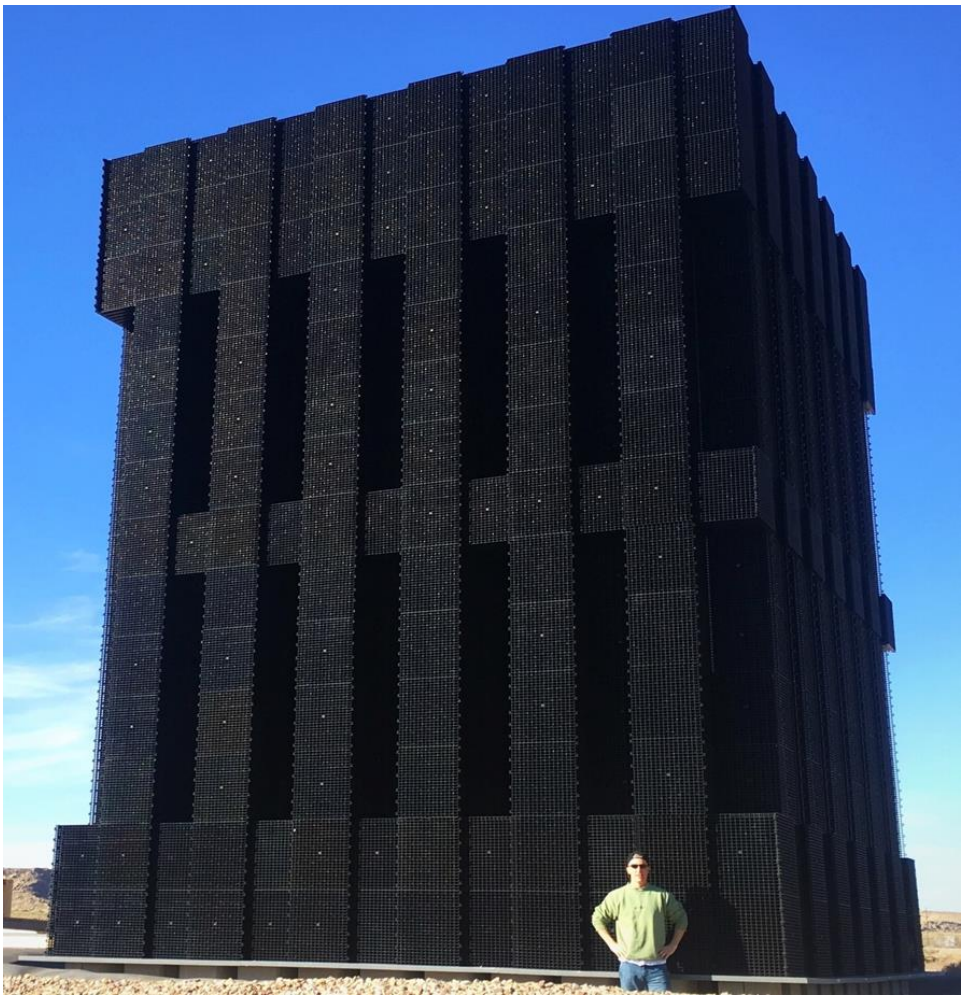
Environmental:

- + 90% reduction to CO_2 emissions
- + No chemicals, filters, or large power demands
- + Maintenance-free and recyclable

MADE FROM 100% RECYCLED HDPE, TOUGH AND MAINTENANCE FREE

EcoVAP Evaporative Matrix™ panels are made entirely from 100% recycled HDPE material, making them extremely tough and resistant. HDPE is the only material that can withstand corrosive produced water, resist scaling, and outlast an operation's lifetime to be recycled.

RAPID INSTALLATION - BUILDING SUPERSTRUCTURES FROM 100% RECYCLED MATERIAL



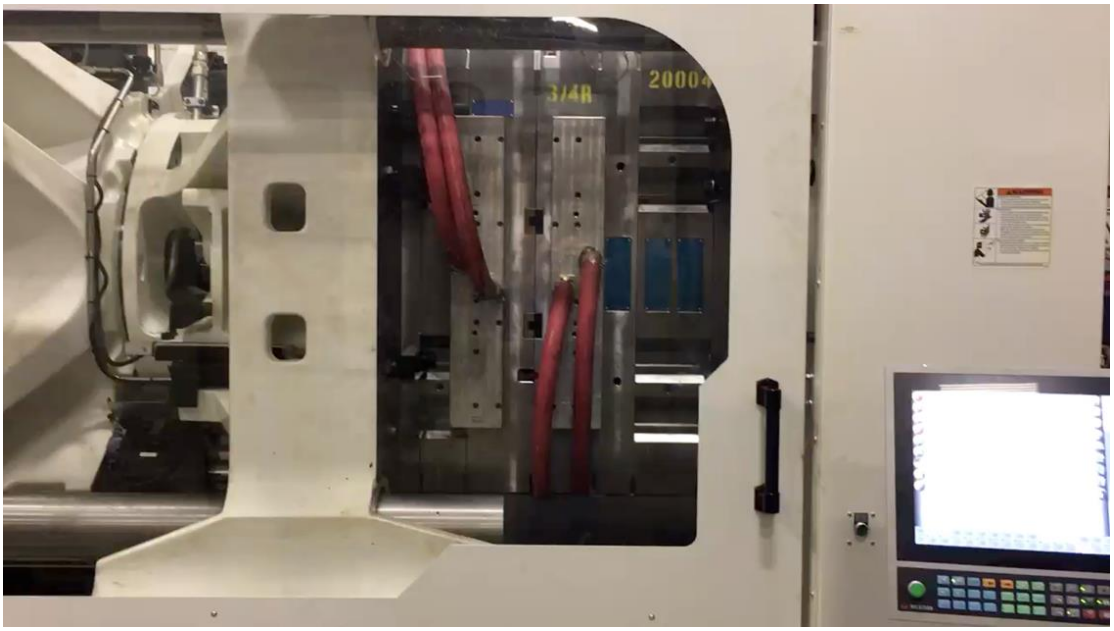
Our unique interlocking design facilitates superstructures built entirely of EcoVAP Evaporative Matrix™ panels. High precision part tolerances enable tight connections spanning hundreds of feet with perfect alignment. In addition, no steel supports, beams, metal screws or other construction hardware make it possible to erect entire structures with a small team of installers and rubber mallets.

SCALABLE, ADAPTABLE, VERSATILE

INFINITE POSSIBILITIES

EcoVAP Evaporative Matrix™ 2'x3'x2" interlocking panels can be connected in multiple configurations to design structures that take advantage of a site's topography and natural convection. Once connected, panel cells form walls capable of spanning hundreds or even thousands of feet. These large-scale installations remain flexible as the panels make it possible to extend, reduce, or even disassemble and relocate an entire structure.

GLOBAL JUST-IN-TIME MANUFACTURING



EcoVAP Evaporative Matrix™ panels can be manufactured in partnership with existing injection molding operations found in most major countries around the world. Instead of shipping hundreds of thousands of fabricated panels to the project site, EcoVAP ships several 23,000 lb molds to the closest fulfillment center and large-scale manufacturing is performed locally.

ECOVAP VS THE COMPETITION

The following table contrasts Ecovap's superior technology with conventional water processing methodologies and their effects on key environmental factors

ENVIRONMENTAL FACTORS	INJECTION WELL DISPOSAL	SURFACE POND EVAPORATION	EVAPORATION & ATOMIZING SPRAYERS	ECOVAP EVAPORATOR MATRIX
EARTHQUAKES	HIGH RISK	NO RISK	NO RISK	NO RISK
TRANSPORTATION ENERGY CONSUMPTION	MODERATE-HIGH	MODERATE	MODERATE	LOWEST
LAND USAGE FOOTPRINT	LOW	HIGH	MEDIUM	90% LESS
DISPOSAL ENERGY CONSUMPTION	MODERATE	LOW	MODERATE	90% LESS
WATER SUPPLY DEGRADATION	HIGH	LOW	LOW	NEGLIGIBLE
AQUIFER CONTAMINATION	MEDIUM RISK	LOW RISK	LOW RISK	VERY LOW RISK
CO2 EMISSIONS	MODERATE-HIGH	MODERATE-HIGH	HIGH	NEGLIGIBLE
RESIDUAL OIL RECOVERY	POOR	GOOD	GOOD	SUPERIOR
BENEFICIAL MINERAL RECOVERY	NONE	GOOD	GOOD	SUPERIOR
ENVIRONMENTAL, SOCIAL, GOVERNANCE (ESG) RANKING	POOR	GOOD	FAIR	SUPERIOR