PreCooll

Save up to a third on the running costs of your cooling system

POWERED BY OXYVAP

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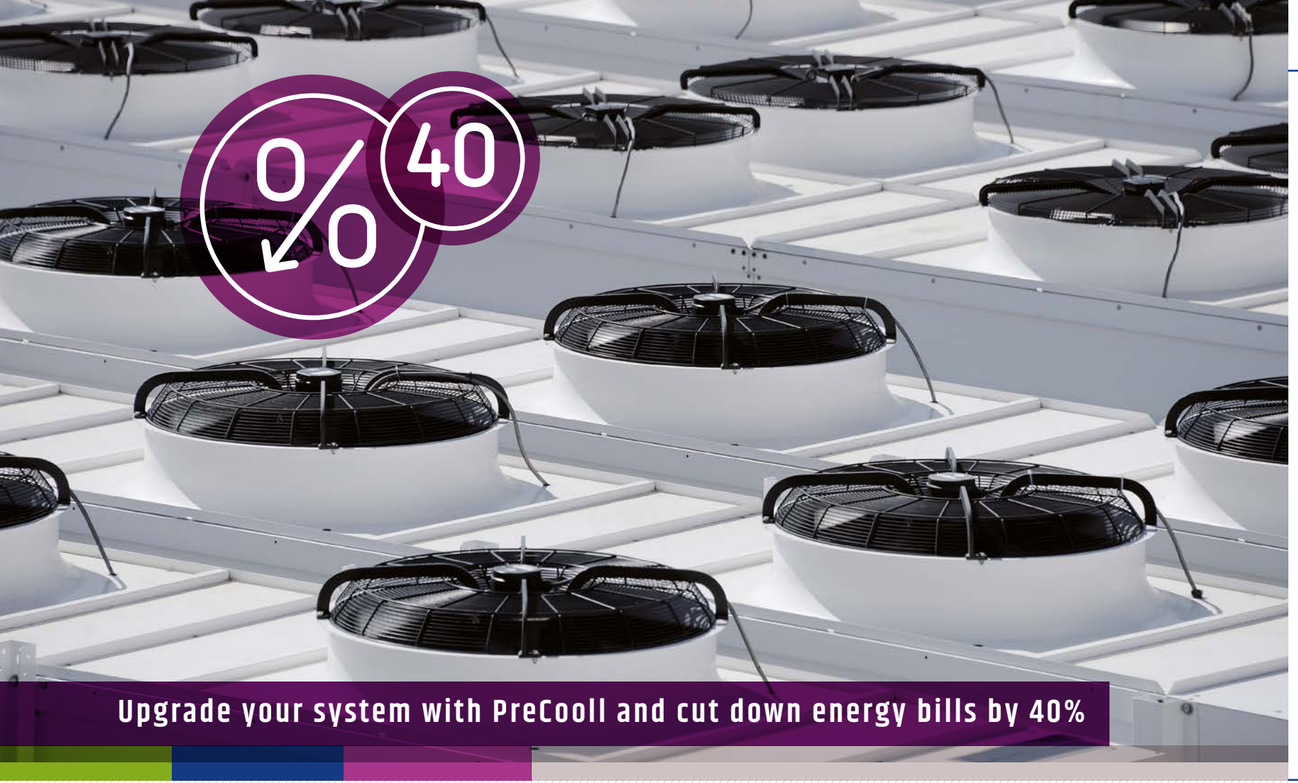
natural air conditioning



Let's face it: industrial cooling systems are money pits. They devour electricity and eat away your profits. Now there is PreCooll.

COOLING USES HALF OF ALL ELECTRICITY Compressor-based cooling systems are responsible for 50 percent of the world's total electricity consumption. Especially during the warmest days, they waste inordinate amounts of energy. Many countries struggle with the power demand surges caused by these widely used cooling systems.

PROFITABLE INVESTMENT A relatively small investment that helps save more than a third on your operational cooling costs is a rare opportunity. PreCooll reduces your environmental footprint and, by realizing significant energy savings, also your day-to-day running costs. The PreCooll proposition becomes even more attractive and profitable when the long-term costs of industrial cooling systems are fully taken into account.

SIMPLE AND EFFECTIVE In spite of their obvious shortcomings, compressor-based cooling systems will remain in use for many years to come. Natural pre-cooling is by far the simplest and most effective way to quickly reduce their impact and achieve significant savings. By reducing peak demands with up to 60 percent, pre-cooling provides welcome relief for overloaded power grids.

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Achieve ultimate cooling efficiency with natural pre-cooling

Cutting cost by using the power of nature

NATURAL TECHNOLOGY PreCooll relies on the extremely powerful natural principle of water evaporation. Encapsulated by super-efficient adiabatic cooling pads, your industrial cooling system can continue to operate in its highest efficiency range, even during the hottest days. Oxycom has taken natural pre-cooling to a new level with the highly efficient Oxyvap technology.

BENEFICIAL MICROCLIMATE PreCooll creates a cool microclimate around your industrial cooling system. Adiabatic cooling of the ambient air before it enters the system is the fastest way to lower energy consumption. Ensuring a steady supply of cold air to your condenser not only boosts efficiency, it also contributes to longer equipment lifetime and lower maintenance costs.

OXYVAP BOOSTS PERFORMANCE Self-cleaning, made of inorganic materials, and with the lowest possible air resistance, Oxyvap guarantees safe operations and maximum savings for many years. Oxyvap can lower the inlet air temperature by as much as 25°C (45°F) in warm climates. This brings 40 percent lower energy use, 10 percent more cooling capacity, and 60 percent peak power reductions well within reach.

EVAPORATION MAKES SENSE It takes 1 m^3 of water and large amounts of fossil fuel to produce 250 kWh of electricity, while evaporating 1 m^3 of water delivers a stunning 695 kWh of cooling power. Any life-cycle analysis will show PreCooll to use less water than cooling systems without adiabatic pre-cooling.

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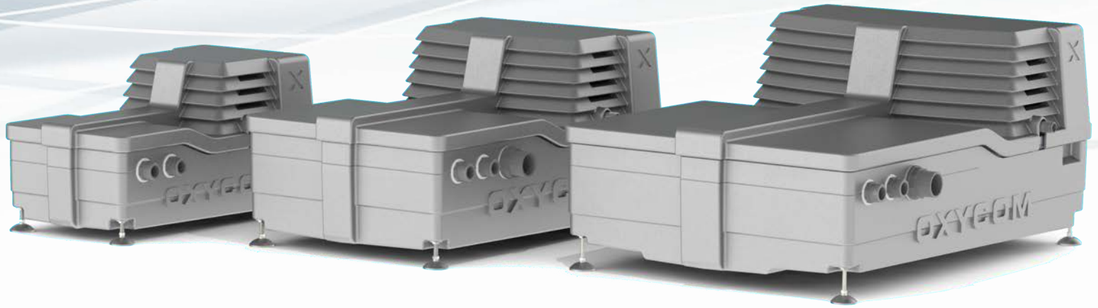


Proven technologies that bring energy efficiency, water management, and hygiene to new levels

Intelligent AquaMizer pumping station ensures maximum efficiency

SMART CONTROLS Key to PreCooll's great performance and longevity is the intelligent AquaMizer pumping station. Maximum water efficiency is achieved with state-of-the-art sensors and control algorithms that monitor the ambient conditions and determine the operation modes, ensuring the PreCooll system is active only when necessary. You can customize operational parameters and connect optional monitoring devices.

SAFE OPERATION The AquaMizer pumping stations are built to last and ensure safe operation for many years. The fully automated water management system continuously monitors water quality, refreshes the water when mineral levels reach certain values, and fully drains the system after operation.

CONNECTED Oxycom continuously improves products and services with the help of data collection and automatic firmware updates when the system is connected. Real-time performance monitoring is optional and allows for further substantial cost reductions through timely service and predictive maintenance.

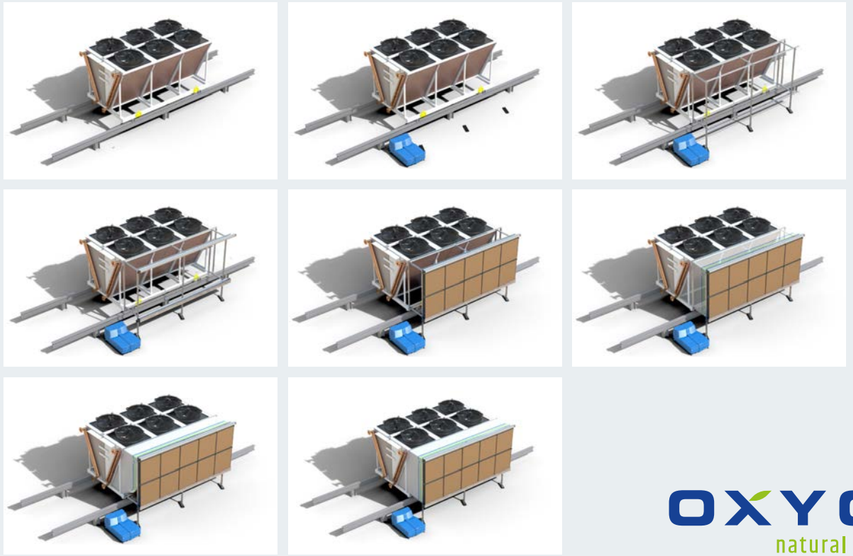
CONNECTED

REAL-TIME MONITORING

PreCooll at a glance

- Best-in-class performance
- Lowest additional pressure drop
- Superior quality and durability
- Creates shading effect
- Excellent hygiene control
- Click-on panel system
- Quick access to cooling system
- Increases system reliability
- Increases cooling capacity
- Decreases operating costs
- Decreases maintenance
- Peak power reduction

Modular setup and click-on panel system enable quick assembly and easy access to cooling unit



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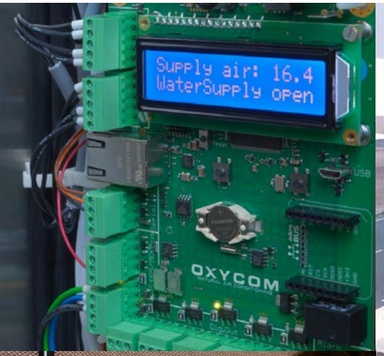
OXYVAP PreCooll compared to spray humidifiers

- No risk of corrosion and clogging of condenser coil
- No risk of Legionella contamination because there are no aerosols in the air
- Natural moisture regulation: no oversaturation or under-humidification
- No water treatment at all required
- Functions as an air washer and keeps your coils clean

OXYVAP PreCooll compared to paper-based contact humidifiers

- Higher energy savings due to the superior pressure drop/efficiency ratio
- Higher water efficiency due to advanced water management system
- Low pressure drop allows for retrofit installation
- Panels can be removed individually, ensuring quick access to condenser
- High durability and long-term reliable performance
- Inorganic materials



Key Components

Embedded controls
Smart adaptation to ambient and chiller operation modes

Pumping stations
Pumping stations with different capacities available

Adaptation kit
Quick and easy adaptation to existing installations

Evaporative media
Super-efficient OXYVAP with anti-bacterial coating

Water sterilizer
Ozone generator eliminates almost all waterborne bacteria and viruses

Pump
Selected to withstand even the the harshest of climates

Water quality sensor
Monitors water quality and ensures not a drop is wasted

Key Specifications

OXYVAP PreCooll

EFFICIENCY	90%
PRESSURE DROP	44 Pa @ 2.0 m/s (0.176 inAq @ 393 fpm)
MAXIMUM AIR VELOCITY	3.0 m/s (590 fpm)

AquaMizer pumping stations

	SMALL	MEDIUM	LARGE
RATED POWER	87 watt	152 watt	232 watt
NOMINAL WATER FLOW	32 lpm @ 2.0 m head (9 gpm @ 79 inAq)	55 lpm @ 2.0 m head (15 gpm @ 79 inAq)	80 lpm @ 2.0 m head (21 gpm @ 79 inAq)
NOMINAL VOLUME	30 L (8 gal)	75 L (20 gal)	130 L (34 gal)
NOMINAL WALL LENGTH	4 m @ 2.0 m head (158 in @ 79 inAq)	7 m @ 2.0 m head (276 in @ 79 inAq)	10 m @ 2.0 m head (394 in @ 79 inAq)
DIMENSIONS	800 mm x 395 mm x 405 mm (31.5 in x 15.6 in x 15.9 in)	1000 mm x 595 mm x 486 mm (39.4 in x 23.5 in x 19.1 in)	1200 mm x 795 mm x 544 mm (47.2 in x 31.3 in x 21.4 in)
MINIMAL HEIGHT COLLECTOR PROFILE	160 mm (6.3 in)	195 mm (7.7 in)	210 mm (8.26 in)
WEIGHT (DRY/WET)	15 kg / 45 kg (33 lb / 99 lb)	20 kg / 95 kg (44 lb / 209 lb)	25 kg / 155 kg (55 lb / 347 lb)

About Oxycom

Oxycom understands the need for fresh and cool air. In this age of growing environmental concern, our goal is to deliver a healthy indoor climate that makes people feel and perform better in every season. Inspired by nature, we develop and produce today's most practical and energy-efficient solutions that point to the future of climate control.

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