

EVAPCO DRY COOLING

Specialists in Air Cooled Condensers
and Air Cooled Heat Exchangers



Dry Cooling Technology



EVAPCO for LIFE

EVAPCO is more than a name. We are a global innovator in heat transfer solutions for the commercial HVAC, power, industrial refrigeration and industrial process markets. We pledge to make everyday life easier, more comfortable, more reliable and more sustainable for people everywhere.

WHO WE ARE

EVAPCO Dry Cooling, Inc. is an EVAPCO majority owned company specializing in the manufacturing of air cooled steam condensers (ACC) for the power generation industry. With a keen focus on research and development, EVAPCO Dry Cooling is a world class ACC manufacturer that continues to drive the industry to the highest standards. With this focus, EVAPCO Dry Cooling offers both traditional A-Frame ACCs as well as the newly introduced state-of-the-art **Advanced Technology™ ACC** that features the **nuCore™** heat exchanger.

WHAT WE DO

EVAPCO Dry Cooling specializes in the design and supply of ACCs and ACHes for the power industry. EVAPCO Dry Cooling has over 5000 MW of operating references in the United States and is considered a premier ACC supplier for the global power market.

EVAPCO Dry Cooling also serves the Power Industry with EVAPCO's eco-Air™ air cooled heat exchangers which are manufactured in EVAPCO's newest, state of the art, manufacturing facility in Taneytown, Maryland and in Greenup, Illinois.

With a 100% US-based execution team and experience supplying ACCs and ACHes globally, EVAPCO Dry Cooling has the knowledge of designing to the codes and regulations of any region in the world.

RESEARCH & DEVELOPMENT

EVAPCO's Wilson E. Bradley Research & Development Center has 10 test laboratories including eight environmental chambers, a sound test pad and a water analytical lab. These facilities provide EVAPCO dedicated R&D space to produce industry leading products in real-world conditions.

EVAPCO's laboratory is the only laboratory in the world with the capabilities to test full size ACC heat exchangers in a controlled environment. This provides EVAPCO the unique advantage to optimize the ACC design with unprecedented precision and to fully understand phenomena such as freezing, air in-leakage, impingement, flow accelerated corrosion (FAC) and air side pressure losses.

The latest addition to the Wilson E. Bradley Research & Development Center is the **Advanced Technology™ ACC** test cell. This test cell is a full scale ACC cell utilizing EVAPCO's **nuCore™** Heat Exchangers which are installed in the same configuration as they would be in an operating power plant.

PROVEN TECHNOLOGY

The EVAPCO Dry Cooling single row finned tubes are installed and operating in more than 45 power plants with a combined electrical generation capacity of over 20GW. Installed in the majority of ACCs worldwide, this fin/tube technology is proven and has developed into the industry standard today. EVAPCO Dry Cooling will continue with this standard of reliability and high thermal performance with the introduction of our new **nuCore™** Heat Exchanger technology.



Introducing the Advanced Technology™ ACC

The Advanced Technology™ ACC featuring **nuCore™ Heat Exchanger** tube bundles provides two important benefits that make it the new standard in air-cooled condensing:

- Superior Thermal Performance
- Significant Installation Cost Savings

The Advanced Technology™ ACC was engineered with three primary objectives:

- Reduce the amount of job site labor required
- Improve safety for site erection
- Reduce cost with improved heat transfer

Advantages of the **nuCore™ Heat Exchanger** include:

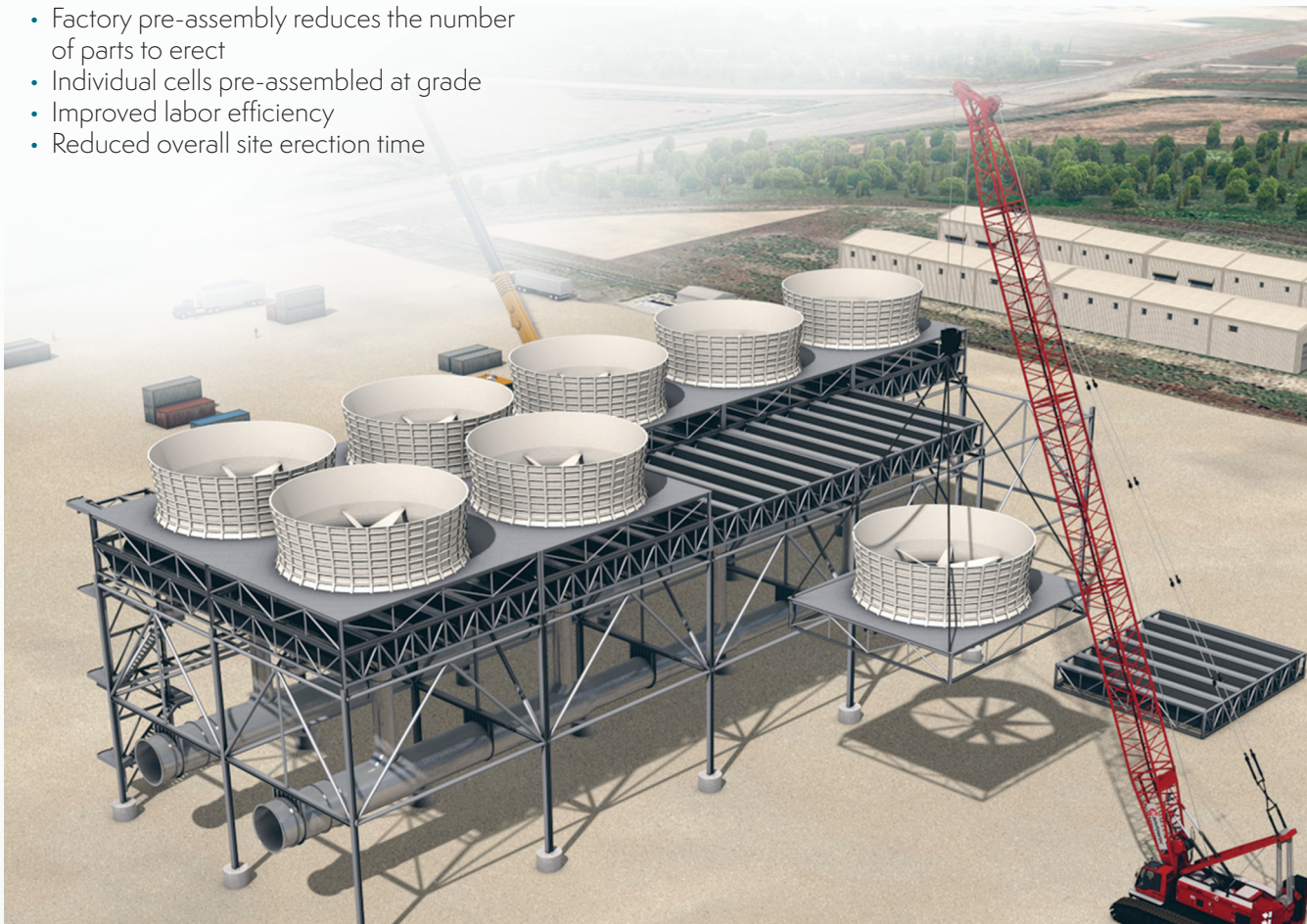
- Improved heat transfer efficiency
- Factory welded headers
- Reduced fouling potential
- Improved freeze resistance
- Reduced sub-cooling

The AT-ACC is designed for **Modular Construction** to provide the following cost saving benefits:

- Factory pre-assembly reduces the number of parts to erect
- Individual cells pre-assembled at grade
- Improved labor efficiency
- Reduced overall site erection time

Benefits of AT-ACC Induced Draft Technology:

- Fans located above the heat exchanger module
- Reduced potential for recirculation
- Lower overall unit height
- Less risk of fan vibration caused by high winds



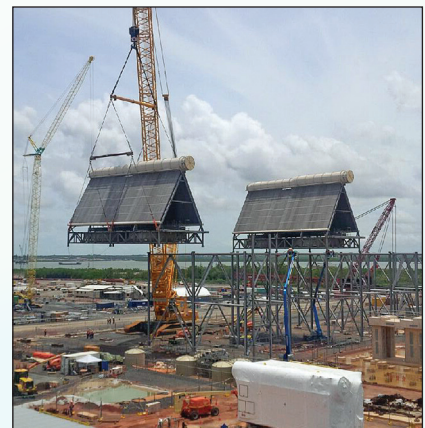
Traditional A-Frame Air Cooled Condensers



EVAPCO Dry Cooling single row heat exchanger cores are in operation in over 35 power plants with combined electrical generation of over 12GW. This type of heat exchanger core has been in operation worldwide since 1990.



EVAPCO Dry Cooling's focus on constructability allows for time and money savings during construction.



eco-Air™ Series Coolers and Condensers

EVAPCO now has the capability to supply all air-cooled heat transfer equipment required for the Power Industry.

Often, due to site constraints, when an air cooled steam condenser is required for the steam cycle, an air cooled heat exchanger is also required for auxiliary cooling.

EVAPCO's eco-Air coolers arrive to the site fully assembled on a flat bed truck or containerized ready to be lifted into place at grade level or raised on a support structure. The robust 304L coils provide a reliable and durable solution for any power generation application.

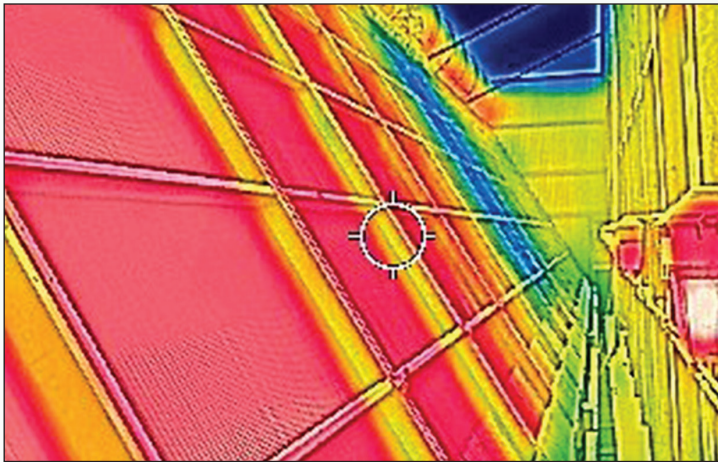
With EVAPCO's innovative V-design and fully tested heat exchanger coils, the eco-Air allows for reduced foot print and higher thermal performance compared to other traditional air cooled heat exchangers.



Services

EVAPCO Dry Cooling offers a number of services, including:

- Mechanical equipment inspections
- Internal and external fin tube inspections
- Fin tube cleaning systems
- CFD modeling
- Structural evaluations
- ACC thermal performance evaluation
- ACC tube bundle replacement
- Dry to hybrid and wet to hybrid cooling system conversion
- Wind screen evaluation
- Reconfiguring ACC operating logic



Spare Parts

Regardless of the Air Cooled Condenser OEM, EVAPCO Dry Cooling can support any ACC spares requirement. Through strong relationships with key suppliers, EVAPCO Dry Cooling can supply spare parts at competitive rates. Components commonly needing spare parts include:

- Fans
- Motors
- Gearboxes
- Steam jet air ejectors
- Vacuum pumps
- Rupture disks
- Vacuum breaker valves
- Isolation valves
- Cleaning system components





WORLDWIDE MANUFACTURING FACILITIES



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