EvaPack™ Series

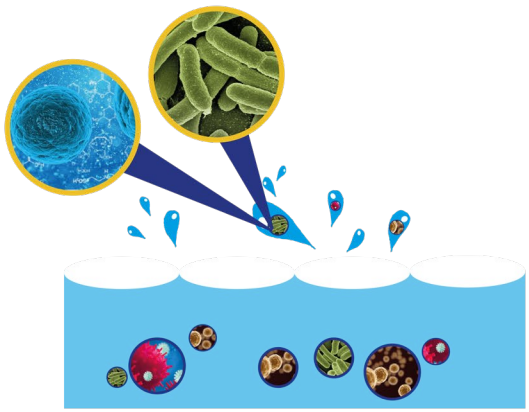
Natural & Safe Evaporation

- Hygienic and inorganic material
- Evaporative pad material ISO 846
- EvaPack™ Series VDI 6022 certified
- Aerosol and odor free
- Designed to avoid any stagnant water

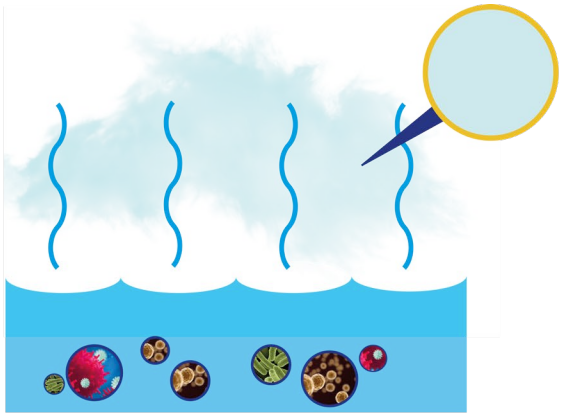
EVAPORATION : SAFE VAPOR PRODUCTION

Evaporation is a phenomenon that occurs on the free water surface and converts water from liquid to gas phase.

« Only pure water is evaporated [...] » (1)



Aerosol dispersion can carry microorganisms



Evaporation does not carry microorganisms

Water molecule size: 0.343 nm^3 / Microorganism sizes: > 4 200 nm^3

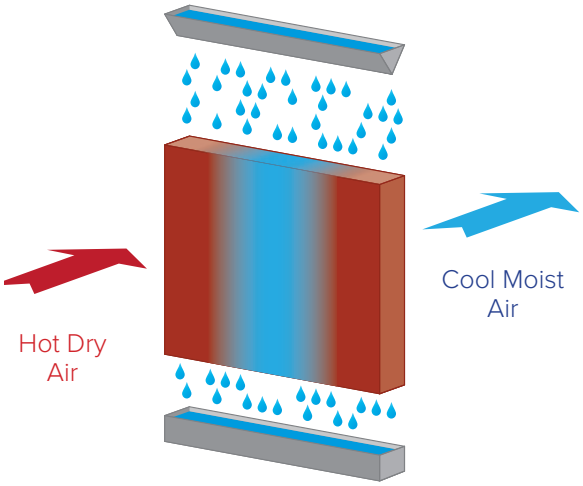
Pure water is at least 12 000 times smaller than microorganisms, **then pure vapor cannot carry microorganisms**.

On the contrary, aerosol size is between 4 200 nm^3 (Ø1 µm) and 42 000 nm^3 (Ø10 µm), consequently aerosol dispersion can easily carry microorganisms over.

Safe adiabatic process

EvaPack™ HUMIDIFIERS/COOLERS

Armstrong EvaPack™ is a safety humidifier and cooler, which through evaporative process converts potable water into vapor.
Cold water below 20°C is used to prevent microorganism proliferation[2].
Air passes through wetted rigid-media, humidifying and cooling, by using the sensible heat of the air. Similar to a natural process observed above lakes and rivers.



Water evaporation with EvaPack™

EvaPack™ PAD FEATURES & BENEFITS

- No rigidity loss. No fiber loss in the air flow;
- Odor free;
- None harmful substances dispersed in the water or in the air. Certified according to the RoHS Directive;
- Hygienic : pad is not a nutriment for microorganisms, certified ISO 846 and VDI 6022;
- No absorption distance;
- Compatible with RO and DI water;
- Non-combustible Euro Class “A1” . No flame, no smoke according to the EN ISO 1716:2011.

EvaPack™

EVAPORATIVE PAD CERTIFIED BY:

REFERENCES

1) Ashrae Handbook, «*HVAC Systems and Equipments*», 2016
2) Ashrae journal, «*Why Evaporative Coolers Have Not Caused Legionnaires Disease*», 1995
See also *Armstrong University HVAC College* : https://www.armstronginternational.com/knowledge/armstrong-university-online (COLLEGE OF HUMIDIFICATION, COLLEGE OF HOT WATER).